

Birla Central Library

PILANI (Jaipur State)

Class No :- 109

Book No :- F95H V. 2

Accession No :- 18418

A HISTORY OF PHILOSOPHY

Revised Edition

VOLUME TWO

BY

B. A. G. FULLER



NEW YORK

HENRY HOLT AND COMPANY

COPYRIGHT, 1938, 1945
BY
HENRY HOLT AND COMPANY, INC.

PRINTED IN THE
UNITED STATES OF AMERICA

PREFACE TO REVISED EDITION OF *A HISTORY OF PHILOSOPHY*

I have revised my *History of Philosophy* at the request of my publishers, who have made it because of the numerous criticisms and suggestions for improvement provoked by the earlier edition. These have been sent to me, anonymously, of course, to give me an idea of the faults found with the first edition, and of the ways proposed for bettering it, especially for classroom use. I expected to find them helpful in the work of revision, but this hope has been disappointed. The universal opinion that the *History* should be condensed and broken into more chapters and sections, I already shared. But when it came to specific advice regarding improvements, I found that the criticisms and suggestions largely canceled one another out, and left me still in the dark and to my own devices as to what to do.

For example, although everyone felt that the book as a whole should be made much shorter, almost everyone complained that some philosopher or philosophic movement had been slighted and wished some chapter or chapters to be lengthened. And with two exceptions, which I shall mention in a moment, there was almost complete disagreement as to what should be given more space. Again, I was taken to task, on the one hand, for including too many lesser lights, and, on the other, for not including more. In short, almost everyone was insistent that I should rob Peter to pay Paul, but none could agree as to which was which.

The quality of the various chapters proved also a bone of contention. One critic, for instance, found the chapter on Spinoza "comparatively lucid and gratifying"; another said it "is not well organized and does this thinker a disservice." Again, while one wished the chapter on Christian philosophy expanded, another found it so bad that he felt it had better be omitted altogether unless completely rewritten in the light of a sympathetic and intelligent reading of the original sources. With the exception of the dropping of the demolition bomb above-mentioned, the chapter drew no fire save for a couple of suggestions for a clearer exposition of the controversy over universals and the doctrine of substantial forms.

Enough, however, to constitute a quorum voted for a more extensive account of the Pre-Socratics and of dialectical materialism and the Marxian theory. Indeed, one critic was so dissatisfied with my meager coverage of the Pre-Socratics that he wondered whether it might not be attributable to a desire on my part not to displace Vol. I of my *History of Greek Philosophy* which deals with early Greek thought at length. And the others, without invoking the economic interpretation of history as a possible explanation of my shortcomings, were equally insistent that the exposition should be lengthened. This I have done, not only because I agreed with them that more space should be given the period, but because I felt that the discussion of the Pre-Socratics in the present edition, as well as in the first volume of the *History of Greek Philosophy*, was in many respects incorrect. I have also enlarged the exposition of dialectical materialism and the Marxian theory. In addition I have revised and added to the discussion of Nietzsche, whom I felt I had treated inadequately. There were also one or two suggestions that I ought to amplify the account of personalism, particularly in its European phases. This I have done. I have, however, held it within the restrictions imposed upon both this and the earlier edition and mentioned no living thinkers.

Since it was obviously impossible to make the revised *History* all things to all teachers of philosophy and to suit everybody's taste, I decided to proceed as follows. All material errors in the old book I would, of course, correct. Since everybody, including myself, agreed that the *History* should be condensed and broken up into more chapters and sections, I would, with the exceptions just noted, ignore all appeals for lengthier exposition of this or that philosophic system or epoch. Under no circumstances would I carry the *History* further into the present or include any philosopher not already touched upon. In abbreviating it I would, however, take into consideration all the specific suggestions as to what should be shortened. Also I would even condense some chapters certain critics wished lengthened. But that I would do only incidentally to a final improvement of the book as a whole. Throughout the text I would, of course, try further to accentuate the clarity of my exposition as well as to improve the writing as a whole where possible.

In reading over the data at my disposal I soon began to suspect that what some of the critics most disliked about the book was myself. There were complaints that I was unsympathetic, that I played favorites, and above all that I betrayed the fact that I found some episodes in the history of philosophy amusing and treated lightly and even

flippantly those that amused me. Therefore, out of deference to these critics I have tried to expurgate the text of all comments, interpretations, and opinions of my own. Particularly I have endeavored to suppress all expressions of the amusement I get from the philosophic spectacle. I have tried, in short, to go the Cheshire Cat one better and to fade from the scene without leaving so much as the trace of a smile—or a frown—behind me.

I do not, of course, claim complete success in this effort. Every philosopher has his particular bias, which cannot but distort and accent somewhat his survey and account of the history of human speculation about the nature of the Real and of man's place in and attachments to it. My bias is naturalistic—and I probably cannot prevent a certain after-image of naturalism persisting even if the smile and the frown have disappeared. I hope, however, that, all things considered, the revised edition of the *History* will be found a much improved text for classroom use.

In conclusion I wish to thank Mr. John W. Weber for his careful reading of the galley proof, and also Mr. Emerson Buchanan for his final proofreading of the page proof. I am also most grateful to Professor Hunter Mead of San Diego State College, who not only has read the galley proof and made many helpful suggestions for the improvement of the text, but has also overhauled and expanded the bibliography that appeared in the earlier edition of the *History*.

B. A. G. F.

Tasco, Gro.
Mexico,
March 15, 1945.

CONTENTS

I. THE RENAISSANCE	I
II. THE REFORMATIONS	19
III. CONTINENTAL PHILOSOPHY TO DESCARTES	26
IV. EARLY ENGLISH PHILOSOPHY	39
V. DESCARTES AND THE OCCASIONALISTS	55
VI. SPINOZA ✓	71
VII. LEIBNITZ ✓	105
VIII. LOCKE	120
IX. BERKELEY ✓	140
X. HUME	152
XI. MINOR EIGHTEENTH-CENTURY BRITISH THINKERS	178
XII. FRENCH AND ITALIAN ENLIGHTENMENT	190
XIII. GERMAN ENLIGHTENMENT	208
XIV. KANT ✓	215
XV. FICHTE	273
XVI. SCHELLING	294
XVII. HEGEL ✓	301
XVIII. SCHOPENHAUER	337
XIX. HERBART	355
XX. MINOR EARLY NINETEENTH-CENTURY CONTINENTAL PHILOSOPHY	366
XXI. COMTE AND POSITIVISM ✓	384
XXII. BRITISH PHILOSOPHY 1800-1870 ✓	391
XXIII. THE EFFECT OF SCIENCE ON PHILOSOPHY	406
XXIV. BRITISH AND FRENCH IDEALISM	423

XXV. GERMAN PHILOSOPHY 1850-1900	43.
XXVI. IDEALISM IN THE UNITED STATES	45 ¹
XXVII. PRAGMATISM ✓	46 ²
XXVIII. ✓ BERGSON, VAIHINGER, CROCE AND GENTILE ✓	474
XXIX. NEO-REALISM	48 ²
BIBLIOGRAPHY	51 ³
LIST OF SOME OF THE WORKS OF PHILOSOPHERS	5'
CHRONOLOGY	51 ⁹
GLOSSARY OF COMMON TERMS	52 ¹
INDEX	5 ²

Chapter I

THE RENAISSANCE

I. THE RENAISSANCE SPIRIT

In the introduction to the *Discourse on Method* Descartes remarks that, after studying in the school of book-learning, he betook himself, for further instruction, to knowledge of himself and of the great book of the world. In so doing he was but following the example set him by the Renaissance. In the latter part of the fifteenth and in the sixteenth century the West, we might say, left the medieval home in which it had been brought up and began to study at the new university of human life opened by the extraordinary changes in orientation that the hundred and fifty years following the fall of Constantinople effected in man's outlook on himself and on the universe.

Enlargement of Spatial and Temporal Perspectives. During this period western Europe recovered and re-read in the original almost all the Greek and Roman literature, philosophy, and historical and scientific treatises of which we are possessed today. The voyages and geographical explorations and discoveries of the epoch acquainted it with the shape and a large part of the map of the world. The scientific interest in the operations of nature, awakened in the fourteenth century, was by now thoroughly aroused, and was beginning its startling revolution, particularly in the field of astronomy, of man's concept of the universe and of his position in it. And the vistas disclosed by these vastly enlarged horizons of space and time invited and impelled him to one of the greatest outbursts of reflective and creative activity that has ever occurred in the history of mankind.

Humanism and the Renaissance. Incidentally to the rediscovery, exercise, and enjoyment of its powers, the human mind was incited to explore and meditate upon itself. These explorations and meditations were guided and inspired in large part by the newly acquired vision of the life of antiquity. The Greeks and the Romans were now seen to have lived for many centuries a good and happy life, and to have built up an enduring and magnificent civilization, without the aid of revelation and supernatural sanctions and of faith in a privileged

origin and destiny for man. Actuated by this disclosure of Graeco-Roman culture and by the general excitement of the times, man's interest and attention tended to shift from the question of what might become of him after death to that of what he might become and accomplish in his present life on earth by the exercise of his native talents.

Thus it was that western Europe awoke to the possibilities latent in the natural man, and that the individual became acutely self-conscious and engrossed with his own particular temperament and capacities and with the problem and the means of expressing them to the utmost. For this reason the epoch is known as the Renaissance, or period of re-birth, and its preoccupation with the development of human self-realization here and now, in this world, within the limits set by birth and death, has given to its spirit the name of *Humanism*.

II. THE RISE AND SPREAD OF HUMANISM

The Spread of Humanism. The western world was fortunate in having at the time rulers who were captivated by the new outlook and made their courts centers for its diffusion. First to be caught up by it were the "culture-mad" despots of the Italian cities, the Medici at Florence, the Gonzaga at Mantua, the d'Este at Ferrara, the Sforza at Milan, Frederick of Urbino, Alfonso of Naples, and Popes like Leo X at Rome.

From Italy the movement spread to France under the patronage of Francis I, where it produced the sculptor Jean Goujon, the architecture of the newer French châteaux and of the Louvre in Paris, the poetry of Ronsard and the prose of Rabelais. It spread to England, thanks to the interest of Henry VII and Humphrey, Duke of Gloucester, and to the migrations from Oxford to Italian centers of learning. Brought back to the universities, its spirit invaded once more the court, partly through the mediation of Sir Thomas More, the author of *Utopia*, and seized upon the nobility. And insensibly it merged into the *floreat* of the Elizabethan Age.

German scholars returned from Italy imbued with the Renaissance. The Emperor Maximilian, Frederick the Wise of Saxony, and the prince cardinal Albert of Mainz, among others, felt its contagion. Strasbourg, Nuremberg, Augsburg became centers of learning. The Rhenish and Danubian academies at Heidelberg and Vienna were instituted. German art was stimulated, though not sensibly modified by Italian influence. In religion and ethics the movements that cul-

minated in the Protestant Reformation were reinforced and accelerated.

Spain for all her intense Catholicism could not escape the spirit of the times. It impregnated her with Loyola, the militant founder of the Jesuits and one of the great figures of the "Counter-Reformation" within the Church. It excited Spanish architecture and painting, resulting in the cathedral at Granada, the town hall at Seville, and the work of El Greco and later of Velasquez. It assumed literary form in the dramas of Lope de Vega and Calderón, the *Don Quixote* of Cervantes, and, across the Portuguese border, in the *Lusiadas* of Camoens.

The Central Part Played by Florence. Of this ever-spreading light Florence was the central sun. Already in Dante she had consciously asserted the worth of modern achievement and measured it on equal terms with that of antiquity. Dante dares what no one in the centuries immediately preceding him would have dared—to rank himself as a poet with Homer and Virgil. In Petrarch and Boccaccio, also, Florence had begun in the fourteenth century to perceive and meditate upon the richness and the worth of human life in this world, and the possibilities of self-fulfillment that lay hidden in the "natural" man, beneath the medieval deposit of supernaturalism. Furthermore, fascinated by the memories of ancient Rome, from which Italians had never forgotten their descent, both Boccaccio and Petrarch had hunted and discovered the manuscripts of many of the "lost" works of classical Latin authors, as, for example, Cicero and Tacitus; and the great chancellor of the Florentine Republic, Salutati, had sought, not unsuccessfully, to conduct his diplomatic correspondence, not in the modernized Latin of the day, but in the ancient Ciceronian style.

III. THE BOOK AND BOOK-LEARNING

The Study of Greek. Passing now to the "humanistic" curriculum of the Renaissance we pause at the "book-learning" in which antiquity was discovered and published throughout Europe. Already, thanks to Salutati, Florence in the last years of the fourteenth century had received her first lessons in Greek from Chrysoloras, and in the first years of the fifteenth had come into possession of many manuscripts of the Greek historians and poets. Then, too, some thirteen years before the fall of Constantinople, Gemisthus Pletho, a Greek delegate to the Council of Florence, which had been convoked as a last attempt to unite the Eastern with the Roman Church, had been retained by Cosimo, the father of the Medicean dynasty, and had founded a Platonic Academy.

Meantime, at Ferrara and at Rome professorships of Greek had been instituted, and Pope Nicholas V had begun the famous collection of Greek manuscripts now preserved in the Vatican Library, and had planned a complete translation of the Greek classics into Latin. In Rome, also, was the Cardinal Bessarion, himself a Greek and a pupil of Gemisthus Pletho, to whom all the Greek scholars in Italy looked as their chief patron and protector. In Naples, and later in Rome, Laurentius Valla had interested himself in the restoration of classical Latin, had disclosed errors in the Vulgate translation of the New Testament, and had tried his hand at translating for the Pope portions of the *Iliad* and of Demosthenes, the whole of Thucydides, and parts of Herodotus. A host of other scholars, both in Rome and other Italian cities, were engaged at Nicholas' behest in similar tasks.

Patronage of Greek Scholars and Hellenic Culture. The collapse of the Byzantine Empire added a flood of refugees to the Greeks already resident in Italy. Many of them gravitated towards Florence, where Lorenzo the Magnificent, Cosimo's son, no mean poet and an enthusiastic patron of learning in all forms, welcomed them to the "garden" of great men with whom he loved to walk. Among them were illustrious scholars, followers of Aristotle as well as Plato, and the conflict between the Platonic and the Aristotelian points of view, which had become sterile in the Church, regained freshness and vigor, and generated a new interest in philosophy whose growth and expansion could no longer be constricted by ecclesiastical prohibitions and commands.

The Florentines took like ducks to water to the new language and to the new vistas it disclosed. All Italy followed suit. The educated learned Greek as a matter of course, and the passion for things Hellenic permeated all classes from princes like Cosimo and Lorenzo de' Medici, Alfonso of Naples, Frederick of Urbino, and Ludovico Sforza at Milan, to their humblest subjects. Indeed, one of the distinguishing characteristics of the Renaissance in Italy is that, whereas elsewhere the gifts of its spirit were confined largely to the cultured and aristocratic classes, the greater part of the Italian population worshiped at its shrine. All classes were transfigured by the love of knowledge, the sense and the pursuit of beauty, the feeling of life as a fine art, the devotion to the amenities and urbanities of daily living, and the aspiration toward individual self-fulfillment and perfection. Even the Church in Italy bowed momentarily before the vision, and, while repeating the letter of the Christian liturgy, worshiped in spirit for a brief space the way of life revealed by the Hellenic world. Nicholas V, Julius II,

and Pius II prayed in what we might call side-chapels, but Leo X and his entourage knelt before the high altar of the ancient gods.

Such patronage from above and popular support from below forced Humanism in Italy to rapid and complete flower. The inclusion of the culture and achievements of ancient Rome within its scope, aroused interest in archaeology, and the ruins of antiquity, which hitherto had served as stone quarries, were now preserved and admired. Art galleries and museums came into being. Libraries, where manuscripts were eagerly collected and copied as fast as the human hand could write, multiplied throughout the land. The invention in Germany of the printing-press, though at first deprecated by the connoisseurs of the fine art of calligraphy, led little by little to the substitution of the book for the manuscript and to an easier and quicker broadcasting of the new learning.

IV. THE BOOK OF THE WORLD

Voyages and Discoveries. Meantime, the book of the world was also opening page by page. On the horizons of the medieval world the Far East and the fabled wealth of Cathay and of Ind had hovered like a mirage. Now, Columbus, inspired by the belief that the earth was round, sought a western passage to these lands, and discovered America. Five years later Vasco da Gama, despatched by the Portuguese Government to find the realm of "Prester John," rounded the Cape of Good Hope and eventually landed at Calicut on the Malabar coast, and founded a trading-post there. Within twenty years, Magellan, following Columbus' example, had discovered the western way to India, and, dying in the Philippines, had left his expedition to complete the circumnavigation of the globe.

Interest in Foreign Lands. The suspicion that the earth was not flat but round, condemned by the early Church as heretical, but harbored by Albertus and Aquinas and strengthened by the translation of Ptolemy, was confirmed. The reports brought back of the newly discovered peoples and civilizations aroused great interest. For centuries, to be sure, European rulers had been accustomed to receiving gifts of strange animals from the potentates of the Near East, but now zoological and botanical gardens came into being, actuated by a scientific interest in natural history. Rare plants and trees and animals were eagerly sought by the Italian cities, in the same spirit as inspired the collection of manuscripts and scholars and artists. Naples boasted of her zebra and giraffe, Leo X of his rhinoceros and elephant. The

elephant, particularly, was a pet of the Roman people, and had its portrait painted. Its death, which threw the city into mourning, was celebrated by a magnificent funeral and obituary verses from one of Leo's poets. This interest was soon applied in many ways. The Italian menu was expanded by new fruits and vegetables, the pharmacopoeia by new medicines. Flower gardens were planted for the express purpose of pleasing the eye. Studs were established, of which the most famous was maintained by the Gonzaga at Mantua, and the breeding of thoroughbred horses began.

This awakened interest in the novel, rare, and curious products of nature went hand in hand with an aroused sense of the beauty of the physical world—a sense that during the earlier Middle Ages had been dormant, but had shown signs of awakening in St. Francis of Assisi and Dante and Petrarch. The loveliness of nature was now perceived with wide-open eyes. Landscape was loved, described, painted. Country life acquired charm. Picnics, expeditions to woods and lakes and streams, were popular. Travel for its own sake—a thing almost unheard of in earlier centuries—became a diversion. The globe-trotter had at last appeared.

V. THE BOOK OF HUMAN NATURE

Shift from the Supernatural to the Natural Man. The startling suggestions from the sudden and immense widening of the horizons of time and space set man thinking about himself. The book of human nature, also, had been opened, and therein he read with amazement and enthusiasm of the powers and opportunities with which nature had endowed him. The supernatural world retreated into the background. The pressure of heaven and the threat of hell paled in comparison with the prospect of the success or failure of his earthly career. This life was not a preface to life beyond the grave. It was a complete story in itself. It was to be seized, manipulated, exploited, refined, perfected to the full extent of the materials that nature had laid before him and of his capacity for dealing with them. In short, human life as a natural event within a natural setting was not something to be died to daily; it was something to be *lived*.

For the first time, too, in some seventeen hundred years man felt himself able again to confront and undertake the task alone. Like the Greeks to whom he looked for fellowship and inspiration, he felt competent to compass the nature of the universe and grasp the truth by the use of reason alone. His native intelligence could dispense with

commandments from on high in figuring out the nature of the good and the conditions of human happiness, and his strength of mind and will was sufficient to raise him to perfection without calling upon divine grace for help. He was master of his salvation, and salvation lay in making the best of himself as he found himself.

The Ideal Natural Man. Man eagerly took to the task of testing his new-found powers and perfecting himself in the mold in which nature had cast him. He became possessed of the ideals of completeness and finish, of polish and distinction and dignity, of a studied refinement of appearance and manner and taste and conduct. The concept of the *gentleman* was born. In *The Courtier*, Castiglione has given us a kind of fashion-plate illustrating the style of human living that the Renaissance man wished and tried to follow. The "well-dressed man" must be a good all-round athlete. He must ride well and dance to perfection. He must be at home in several languages, with Latin and Italian as an absolute minimum. He must be acquainted with literature and the fine arts, and have some knowledge of music. He must excel at the art of delicate love-making. He must be calm, dignified, independent. All these qualities must be interwoven and expressed in a single harmonious pattern of courtesy and good breeding.

In Italy the ideal of the gentleman, like the spirit of the Renaissance, was not restricted to the upper classes but was shared by the population at large. It broke down the distinction between the noble and the burgher. This, it should be said, had never been so marked in Italy as elsewhere, because of the democracy of the Italian priesthood, and the town, rather than castle or country, life of the Italian aristocracy. The princes of the Church might spring from the humblest origins, the peasant might become a Pope. In the cities the noble and the bourgeois families lived much the same lives, had much the same interests, and were constantly thrown into friendly contact with one another. What snobbishness there was, was not then difficult to overcome. It was generally agreed that birth and wealth mattered little. True nobility is nobility of accomplishment alone, and that nobility is open to every man.¹ The only true class distinction was that between those who had acquired, in passable measure at least, the manner, the bearing, the accomplishments, and the culture of the "gentleman" and those who had not. The so-called "aristocracy" of the English and the French nobility, whom the Renaissance had not as yet reached, was held up to ridicule, and their unurban, isolated life of hunting and hawking

¹ Cf. Poggio's dialogue *On Nobility*.

was reckoned but a degree less boorish than that of the German robber-barons.

Interest in Culture and the Arts. Reflection upon "copy" provided by the spectacle of human life bred a flair for history and for literary and dramatic comment. The archaeological interest in antiquity was supplemented by a cult of "national" shrines and monuments, of the supposed birthplaces and tombs, not only of classic heroes, but of the contemporary great. The vision of future generations and of an immortal fame in time to come took shape, and writers and artists composed their work with an eye to the judgment of posterity. History and autobiography and satire became popular, as well as tragedy and comedy.

The desire to perfect the individual outwardly as well as inwardly raised dress and deportment and diction to the level of fine arts. Insistence upon embellishing the daily surroundings in which he moved created architecture, civic and private, of great magnificenc . And against this imposing background, to delight the eye in moments of relaxation and festival, ballet and pantomime and pageant were lavishly presented.

We have not time to dwell upon the *floreat* of the arts which is one of the glories of the epoch. In the long procession of genius we may single out the poets Ariosto and Tasso; the historian and political observer Machiavelli; Benvenuto Cellini, sculptor and worker in precious metals, author of the famous autobiography; Leonardo da Vinci, to whom we shall return in a moment; Michelangelo, poet, painter, sculptor and architect; the architects Brunelleschi, Bramanti and Palladio; sculptors like Sansovino and Donatello; painters like Botticelli, Raphael, Correggio, Giorgione, Titian and Tintoretto. But in mentioning them we have only noted a fraction of the famous artists the Italian Renaissance brought forth.

The Morals of the Renaissance. The Renaissance, however, was by no means an altogether Golden Age. In its eager and passionate aiming at the Hellenic ideal, its bolt flew wide of the mark and missed the core of sound ethics about which Greek thinking and the fine art of Greek living centered. Its passion for perfecting the individual ignored the essentially social character of human life and the multiple restraints imposed upon the individual by his particular "lot" in the social complex, upon which the Greeks laid such stress. Its quest of universality and complete self-realization overlooked the "moderation in all things," the balance and the harmony, by which the Hellenic vision of the self-fulfilled human being was clarified and given focus.

Its cult of the natural man worshiped a being above the discipline of the limitations imposed by nature upon humanity and committed the unforgivable sin against the Hellenic spirit, denounced by the Greeks themselves as the quintessence and the source of all human misdoing—the sin of “hybris,” of insolence, of overstepping the bounds.

So it was that the Renaissance was a corrupt, licentious, ruthless, revengeful age in which men shrank from no deceit or violence, however dishonest or highhanded, in gaining their ends and attaining their personal self-realization. The individual had got out of hand and was running amuck. Of the ethical deficiencies of the Renaissance, the Borgias have become, doubtless with exaggeration of their crimes, the traditional horrible example.

Absence of Hypocrisy. There was, however, one sin conspicuous by its absence in the Renaissance. The epoch was without hypocrisy. It was free from cant or smugness. Men did not rationalize their personal desires and picture to themselves their schemes for getting their own way as thoughtfulness for the good of others. They ran naked and unashamed in their race for success, and were frank in their intention of using any means to sweep aside everything and everybody that interfered with their winning the prize they coveted. Their vices were open and aboveboard, concealed never from themselves, and from others only so far as good taste demanded.

The Standard of “Honor.” This lack of hypocrisy may have been a reflection of the one moral standard to which the age was really held—the ideal of “honor,” which was supposed to govern the conduct of the “gentleman.” But the sentiment of honor, then as now, was less concerned with what should or should not be done than with a manner of doing whatever one did. A man could act in all matters “nobly,” like a gentleman, or vulgarly, like the common herd. Honor, then, would permit much that ethics would not. Still, the sentiment had ethical significance in that it recognized a better and a worse and prescribed the better. Behavior condoned by it was on the whole morally preferable to the behavior it condemned. The discipline it imposed upon action was considerable and salutary.

Renaissance Morals Criticized. It should be said, moreover, that thoughtful and well-poised observers noted and deplored the preoccupation with personality and the excess of individualism that threatened the social and moral structure of the epoch. To quote from Burckhardt’s classic work, “It was not one of those methodistical moralists who in every age feel themselves called to declaim against the wickedness of the time, but it was Machiavelli, who, in one of his most

well-considered works, said openly: 'We Italians are irreligious and corrupt above others.'"² Machiavelli was certainly no saint, and his *Il Principe* is commonly held up as an example of realism and cynicism in politics; though it is only fair to add that the regimen laid down for the would-be successful prince is not unlike the prescription written for the tyrant by Aristotle, in his severely medical and dispassionate discussion in the *Politics* of how every form of government may best preserve its health and escape the ever-threatening germ of revolution.

Savonarola. Nor were the times without their reformers whose excesses were scarcely less marked than those against which they declaimed. Preachers and prophets, drawn largely from the monastic orders, or from self-instituted hermits, ran up and down the land, summoning the people to put aside their wickedness and be saved. Greatest and one of the earliest was the Dominican Savonarola, whose eloquence so converted for a time the whole population of Florence that for four years (1494-1498) he had the whole city, then in temporary revolt against the Medici, not only in his spiritual but also in his political power. His exhortations he supplemented with an elaborate spy system, which kept the private life of the Florentines under constant surveillance, reported delinquencies, and even went so far as to confiscate by force all books and works of art that did not meet with his approval. The climax came in 1497 in a great public burning of books and manuscripts of authors like Boccaccio and Pulci and Petrarch, of articles of adornment, of playing-cards and other games, of musical instruments, of paintings and statues, ancient as well as modern, and of everything else, taken by force or piously offered, that was not in accordance with reformed ideals. A year later, Savonarola himself, excommunicated by the Church, deserted by the fickle populace, and condemned by a new, hostile administration, was burned on the same spot.

VI. LEONARDO DA VINCI

Leonardo's Predecessor, Alberti. It is said that during one of Savonarola's sermons in the Duomo a man was seen leaning against a pillar, heedless apparently of the storm of emotion that beat about him, busily making random sketches of the facial expressions of the frenzied congregation. This man was Leonardo da Vinci. Leonardo is perhaps the most fascinating and enigmatic human being that has

² Burckhardt, *The Renaissance in Italy*, p. 432.

ever appeared upon the earth. In him the Renaissance became incarnate. He had had, indeed, his prophet in Leon Battista Alberti (d. 1474), who was endowed with the same universality of interest, talent, and practical accomplishment. The facets of Alberti's versatility are not, indeed, so numerous. Neither do they shine so brilliantly, or with so deep and clear an inner fire as burns within the pure diamond of Leonardo's genius. Still, in describing the stuff of which Leonardo was made we are describing that which in lesser measure entered into the making of Alberti.

Universal Genius. Strong, handsome, skilled in all athletic exercises, an accomplished musician, completely a man of the world, the friend of kings and princes, and endowed with an extraordinary personal charm and magnetism, Leonardo would by these qualities alone have satisfied the standards set for the perfect "courtier." Clad, however, in this outward magnificence, walked probably the most universal genius of all time. Of his painting there is no need to speak in the presence of *The Last Supper*, *The Gioconda (Mona Lisa)*, *The Virgin of the Rocks*, and *The Virgin with Saint Anne*. Scarcely less admired was his colossal equestrian statue of Francesco Sforza, unfortunately destroyed. As an architect he assisted in the building of the cathedrals at Como and Pavia and in the construction of a dome for the cathedral of Milan. His manuscripts show the care with which he studied the architectural problems of stresses and strains and loads, the principles of the supporting arch, and even the question of acoustics. He organized and directed the great spectacles and pageants in which the court of Milan delighted. He planned on paper cities scientifically laid out, with elevated highways above the streets, and with the elements if not the gadgets of modern sanitation.

He also brought the fortifications of Milan up to date. He had imagined many military innovations, such as exploding fire, siege mines and methods of destroying them, had improved scaling-ladders, catapults and pontoon-bridges, and for naval warfare had proposed gas bombs, fire projectors, and rams moved by levers. He also busied himself with the manufacture of cannon, worked out the principles of ballistics, and invented explosive shells and something, not unlike the machine-gun, designed to spray bullets in every direction.

Civil and Mechanical Engineer and Inventor. To the needs of peace and the necessities of everyday life he devoted himself with the same zeal. He devised a system of canals for irrigating the Lombard plains and at the same time preventing disastrous floods. For digging them he invented dredges, and locks to make them navigable.

Swamps he proposed to drain by siphons. He experimented with different methods of utilizing water-power, among them the first turbine. The power of steam also fascinated him. He speculated as to the possibility of working pumps and moving boats with it, and invented a cannon in which it was the projective force. He also tried his hand at machines for rolling metal, boring and planing wood, and sawing wood, marble and stone; at devices for clipping, at spinning-machines with spindles and bobbins; at ships' logs and speedometers and odometers and rain-gauges; at methods of improving ropes; not to speak of levers and jacks and arrangements of pulleys for dealing with heavy weights, and even revolving cranes.

Finally, we should note his efforts to invent flying-machines, submarine boats, and devices for enabling man to walk on water. To this end he devoted himself to studying the structure and the movement of fishes and birds, and their ability to support themselves and keep afloat and aloft in the water and the air. His manuscripts contain many notes and designs dealing with these matters. Having only man-power as a source of driving energy, he could not succeed. But had he possessed the internal combustion-engine, the first airplane might have taken off from the Lombard plain just as Columbus was discovering America.

Interest in Pure Science. Leonardo was not simply a supreme artist and inventive genius. His inventions, like his art, were incidental to a consuming curiosity regarding the structure and operations of nature, the mere satisfaction of which was to him an end in itself. By disposition he was a pure scientist, seeking the truth for its own sake, and the desire to grasp and possess it was his dominating and perhaps his only real passion. Nor could he in his practical applications take advantage, like modern inventors, of principles already discovered and knowledge already consolidated. Nature, whose inmost secrets he so ardently yearned to uncover, still lay, despite the scientific stirrings of the thirteenth and fourteenth centuries, wrapped in a thousand years of Platonic, Aristotelian, and Christian tradition.

Leonardo, then, had to read as he ran and to discover and develop largely by himself the principles he applied. So it is that we find him accompanying his painting and his sculpture with an investigation of the laws of perspective and chiaroscuro, and with detailed physiological and anatomical studies that pry deeply into the secrets of the human body, and boldly anticipate the discovery of the circulation of the blood, the structure of the nervous system, the localization of the optical and olfactory centers in the brain, and the way in which the eye functions

as an organ of vision. His architecture and his engineering, civil, mechanical, hydraulic, military, and naval, go hand in hand with speculations in pure physics that lead him to the verge of the laws of inertia and acceleration, the molecular theory of liquids, the undulatory theory of light and of sound, the correlation of reflection and echo, and the grouping together of light, sound, and the radiating waves set up by a stone thrown into water.

Ranging further afield, his insatiable curiosity dealt with geology and astronomy. The discovery of fossil sea-shells on the hill-tops suggested to him the elevation of continents from the sea, the succession of geologic periods, and the place of erosion in molding the landscape. The Ptolemaic astronomy he rejected on the ground that the crystalline spheres would destroy each other by friction. The earth he believed was round, and not the center of the universe but a star. The light of the stars and of the moon he regarded as sunlight reflected from seas that covered them in part as they did the earth. And afar off and dimly he caught a glimpse of the principle of gravitation.

Insistence on the Mathematical Basis of Pure and Applied Science. But this was not all. Leonardo's generalizing power and the vast sweep of his imagination inspired him with a concept of the nature and method of science in all fields. Herein he was doubtless aided by reading the manuscripts, as yet unpublished, of Archimedes, who in the third century B.C. had correctly divined and had begun to develop the scientific implications and the possibilities of the atomic theory. In any case, Leonardo reached back across the centuries and took up the torch of the physical sciences where it had fallen from the dying hand of Archimedes and lain so long neglected. Aided by its light, he had already set forth the principles of modern mechanics a hundred years before Galileo, and, a hundred and fifty before Descartes, had made a universal application of mathematics to mechanics and a sweeping and unqualified application of the mechanical theory to the whole of nature. No human investigation, he tells us, can call itself science unless it proceeds by mathematical demonstration. Of all branches of investigation, mechanical science he considers to be the most useful and the most noble, since all the movements of all moving bodies, animate as well as inanimate, take place according to mechanical principles. Mechanical motion is the cause of every life and the mainspring of every activity.

Insistence on the Empirical Basis of Scientific Knowledge. At the same time Leonardo, for all his devotion to mathematics and pure science, was true to the empirical spirit. His scientific imagination,

however high it might soar, and however far it might circle, always took off from the field of fact and returned to it to be checked up and refueled with experience. Upon the necessity of the fidelity of scientific theory to experience and of its constant verification by experience, he cannot too strongly insist. All knowledge, he tells us, begins in sensation, and all wisdom is the daughter of experience. All science is vain and full of error that is not born from experience and does not end in experience, and whose beginning, middle and end do not deal with data transmitted by one of the five senses.

To draw valid inferences from these data continual observation and experiment are necessary. Above all, the scientist must keep an open, detached and impartial mind, fearless of any conclusion to which his investigation may lead him, and of any shock to his pious preferences and ideals it may administer. Edification has no place in science. Of suppression and distortion in the interest of faith and morals, Leonardo will have none. All hindrances placed in the way of discovering and publishing the truth turn themselves into penances. A lie is so ignoble that even though it should say great things of God it would detract from his divinity. Truth is so excellent that it ennobles the humblest thing it praises.

Exaltation of Knowledge. For Leonardo science also spells happiness and salvation. Knowledge is desired for its own sake. It is the ornament and sustenance of the human mind. It fortifies us against the ravages of time and old age. Contemplation of the truth is man's supreme joy. Nay more, it is only by facing the truth that man can make the best of his other interests and activities and learn how to live. Knowledge teaches him what things can and what things cannot be; where and when to acquiesce in the inexorable necessities of the natural order, and where and when he may manipulate and conquer nature, and mold her to his desires.

But acquiescence in what must be acquires an almost religious exaltation from the awe-inspiring impersonality and impartiality of the rigid determinism that governs every movement of the universe from the orbits of the stars to the fall of the sparrow. Marvelous and stupendous, Leonardo exclaims, is necessity. Necessity compels every event to proceed inevitably from a cause and to produce as inevitably its effect. Necessity is the mistress, the governor, the theme, the curb, the eternal and unbroken law of nature, the order that, living infused in her, makes her rational and enables us to understand and deal with her.

At the same time, the analogy of the organism vies with that of

mechanism in seizing upon Leonardo's imagination. Man is the model of the universe. The operations of nature are to be understood in terms of his desires, his eagerness, his impatience, his welcoming of the new. The earth is a living being, a work of art of which nature is the creator. Its skeleton is rock, and within it the waters circulate like the blood in the human being.

Attitude Towards the Church. Although he lived and died at peace with the Church, Leonardo, like many another man of the Renaissance, took his Catholicism with a grain of salt. By temperament a spectator, and free from reformatory impulses, he was amused or disgusted rather than outraged by the abuses that were so soon to precipitate the Protestant and the Counter-Reformations. But he openly expresses his contempt of the monks, of the cultus of the Virgin and the Saints, and of the sale of indulgences, discredits the story of the Flood, and apparently denies the divinity of Christ. His whole attitude is well summed up in his remark that, if we are doubtful of the evidence of our senses, we may well be still more doubtful of things of which there is no sensible evidence, like the being of God and the soul and other such things about which people are always disputing and contradicting one another.

Inner Solitude. Leonardo, however, paid the price for the universality of his genius. Attuned not only to the rich, many-keyed, and infinitely complicated music of the life that throbbed and flowed about him, but also to the austere harmonies of the outer spaces and of distant times long gone and yet to be; sensitive, subtle, complex, and conscious of his keener ear, his profounder and wider vision, and his greater power to understand what he saw and heard; aware of his supreme artistic capacity for perceiving and creating beauty, and of his immense inventive flair for grasping the practical applications of what he understood; he was imprisoned in the solitude to which all men of high genius are condemned. Kindly, humane, tolerant and compassionate as Leonardo always was in dealing with his fellows, and much as those who knew him loved him, there was always between him and them the barrier of his inner detachment and isolation, which could not be broken down.

Again, there was more in him struggling for fruition than could be harvested within any single finite mind. Only a god could have realized together harmoniously and to their fullest the myriad potentialities with which he was endowed. So in Leonardo the scientist was perhaps purchased at the price of the artist, though the complexity of his genius gives his painting an ambiguous and subtle

fascination. Certainly the artist in him was purchased at the price of the scientist, since, had he not been diverted from scientific research by his painting and sculpture, he might, for example, have discovered the steam-engine.

Summary of Leonardo's Character and Life. Generally speaking, his manifold talents diffused his energy and stood in the way of his making the best of any one of them. And all of them were troubled by the sense of the unknown and by the overmastering curiosity to penetrate its mysteries, before which he was forever driven. Like some venturesome sailor of the western seas, he abandoned the sure, sheltered Mediterranean coasts of thought for the boundless and mist-clouded Atlantic, following the lure of its ever-receding horizon, and sighting as he went the dim outlines of island after island, which his pursuit of what might lie beyond left him no time to land on and explore. The most he could spare was a moment to sketch their outlines and to guess and prophesy their fertility. He left it to future generations to colonize and exploit them.

Finally it may be that Leonardo paid a price in happiness for all that he was and did. And yet, who would not rather, like Odysseus, hear the intolerable sweetness of the Sirens' song, lashed though he be to the mast of finite existence, and knowing that abandonment to it spells death, than row like the multitude, with stopped ears, untouched and untroubled by its enchantment?

Such was Leonardo da Vinci, courtier, athlete, musician, painter, sculptor, architect, hydraulic, civil, mechanical, military and naval engineer, inventor, mathematician, physicist, astronomer, geologist, biologist, botanist, physiologist, philosopher, "a mind forever voyaging through strange seas of thought alone." He was born in 1452, the illegitimate son of a Florentine lawyer, studied painting in Florence under Verrocchio and attracted the attention of Lorenzo the Magnificent. He lived at Milan from 1483 to 1499 at the court of Ludovico Sforza and passed a year at Rome in the service of Cesare Borgia, and twelve years more in Florence. Finally he accompanied Francis I to France, and four years later, in 1519, died and was buried at Amboise on the Loire.

Copernicus and Galileo. Leonardo proved to be the precursor of continued scientific discovery, chiefly in the field of astronomy. Early in the sixteenth century, Copernicus (1474-1543), by his reading of Ptolemy and by studies of the heavens made with the naked eye, had become convinced that the Ptolemaic astronomy was incorrect and that the earth revolved about the sun. This theory was borne out by

Galileo (1564-1642), whose improvements of the telescope revealed the reflected character of moonlight, the moons of Jupiter, the phases of Venus, the rings of Saturn, the occurrence of sunspots and the rotation of the sun upon its axis. Galileo is also famous for his experiments in mechanics, his studies of the law of acceleration, and of the principle of the pendulum. For his "heresy" respecting the revolution of the earth about the sun Galileo was brought before the Inquisition and forced to recant his error. It is said that as he rose from his knees after solemnly abjuring his opinion, he was heard to murmur, "*E pur si muove*," "Nevertheless it [the earth] *does* move."

Tycho Brahe and Kepler. Meantime Kepler (1571-1630), inspired by Tycho Brahe's work, and attempting to explain the incompatibility of the observed orbit of Mars with the theory of circular revolution, confirmed the heliocentric hypothesis of Copernicus and Galileo, and shattered once and for all the Ptolemaic spheres by his discovery that the paths followed by the planets as they revolved about the sun were not circular but elliptical. He worked out the other two great laws of planetary motion, that in equal times the planets cover such portions of their elliptical orbits as help enclose equal areas pivoted upon the sun, and that the squares of the periods of their revolutions are proportional to the cubes of their mean distances from the sun. He also studied comets, ascribed the tides to the attraction of the moon, and to some extent anticipated the Newtonian discovery of gravitation in his theory that the revolution of the planets was caused by magnetic influences radiating from the sun.

Scientific Progress. While this great astronomical assertion was in progress, upsets were occurring in other fields of scientific investigation. Under the leadership of Vesalius (1514-1564) medicine and anatomy threw off the authority of Galen; botany and natural history made great strides under Gesner (1516-1565); Porta (1575-1615) by his discovery of the *camera obscura* took the first step in the direction of modern photography; and Gilbert (1544-1603) interested himself in magnetic and electrical phenomena.

The shock administered philosophy, as well as theology, by the work of Copernicus, Galileo, and Kepler was tremendous. It destroyed all outer evidence of man's focal and privileged situation in the universe, upon which in his philosophical and theological systems he had preened himself so long. It shattered the crystalline spheres that had sheltered and revolved about him, and that had substantiated his claim to supreme importance in God's eyes by making him also the physical center of the world. Nay more, the solar system, of which

he now found himself inhabiting a small and incidental fragment, became itself a physically insignificant incident in a universe to which no bounds could be set.

So it came about that whereas the earlier philosophers of the Renaissance had been mainly influenced by the recovery of ancient philosophy, almost in its entirety, in the original texts, the thought of the late sixteenth century was shot through and through with the excitement of the new scientific vision. Henceforth, too, the ancients were to be read in the light of the new knowledge. But before returning to philosophy, we must review the other great upheaval of the times—the Protestant and the Counter-Reformations.

Chapter II

THE REFORMATIONS

I. THE PROTESTANT REFORMATION

Italian Tolerance of Ecclesiastical Corruption. In Italy the corruption into which the Church had fallen alienated the respect of the thinking classes, just as the intellectual movement of the Renaissance had alienated their belief, and her hold upon the entire population had been weakened by the spectacle she offered. But, although the Italians found the behavior of the Church revolting, they also found much in the situation to tickle their sense of humor, appeal to their irony, and titillate their intellectual cynicism; at any rate, not enough to drive them to rebel. Moreover, Catholicism was too interwoven with the life of the Italian people, and the Church was too profoundly a part of the fabric and pattern of their society to be easily ripped from their existence. Things like the sale of indulgences, the veneration of miracle-working images, the prevalence of miracle-mongers, and the conspicuous irreverence, venality, and immorality of the priests and monks, and particularly of the mendicant friars, were publicly derided, satirized, scorned, deplored and denounced. But the general gesture of revolt was a shrug of the shoulders, an aversion of the eyes, a tolerant sigh that the clergy, after all, were human and that humanity, after all, was frail. Even the Franciscan preachers of contrition and reform, or Savonarola with his eloquence, could not at the moment succeed in arousing moral tempests of more than teapot size. It needed the tremendous shock from the north and the loss of half of Europe from her fold to arouse the Church to an effective sense of her condition and to determined and drastic action.

Growing Resentment of Ecclesiastical Corruption in Germany. This shock had been long preparing and was now imminent. In Germany men were less sophisticated, less gifted with the sense of irony and drama, less the cynical spectator, less tolerant of life's shortcomings; more readily shocked, more prone to moral indignation, more easily pushed beyond shrugs and satirical jests to active reform. Moreover, political resentment against the tyranny and the exactions of the clergy

had steadily been increasing among the German masses during the fifteenth century. The wealth of the Church was constantly and generally denounced as amassed at the expense of the peasants, and there were mutterings that it should be confiscated and divided among the poor. In the early years of the sixteenth century discontent had reached the proportions of a smoldering revolution, constantly flaring up in scattered peasant insurrections, which, however, were sternly extinguished before they could burst into full flame. It needed only the touch of a poker or the breath of a bellows to produce a general conflagration.

Luther's Attack. These were provided by Luther (1483-1546), an Augustinian monk. He had long shared the discontent with Aristotle, and had further suspicions that the Church underestimated the part played by faith and divine grace in the work of salvation. Indeed, in his opinion, she was untrue to the teaching of St. Augustine, and her unfavorable attitude towards the doctrine of predestination was in error. Moreover, he felt, the reliance she placed upon the sacraments was an almost blasphemous substitute for direct recourse to the mercy of God. Particularly shocking was the granting of indulgences, which might seem to flout the decrees of divine predestination and to imply an arrogation by the Church of a power to pardon sinners that belonged to God alone. That she should furthermore put this power up for sale and barter in her remission of sins for money was a scandal that could not be endured. So it was that on November 1st, 1517, Luther boldly posted his ninety-five theses against the sale of indulgences upon the door of the Church in Wittenberg, the town where he was teaching.

The news traveled like lightning to Rome, where its implied challenge of the Pope's full powers as Vicar of Christ was at once perceived. Summoned before the Diet of Augsburg the next year, Luther refused to retract. Moreover, his attention was now consciously turned upon the Papacy, and further reflection and study led him to deny its divine origin and authority. He was now well started upon the war-path. He denied that the clergy were set apart by their office from other men, and exempt from secular jurisdiction; that they alone were competent to interpret the Scriptures correctly, and then only when convoked in Council by the Pope. These views he advanced in three addresses to the German nation, and supplemented them by calling upon the temporal authorities to undertake the reformation of the Church.

The Diet of Worms and Its Results. The effect was catastrophic. At

the Diet of Worms in 1521, Luther received so much support that the imperial edict condemning him, instigated by the Papal nuncio, fell flat, and Luther remained undisturbed and free to continue his campaign. Many of the clergy as well as the laity flocked to his banner, and the more radical among them now began to denounce monasticism, the celibacy of the clergy, the "idolatrous" veneration, as they deemed it, of the Virgin Mary and the Saints, and of the Host. Monks deserted their monasteries, priests got married, churches were invaded, images were broken, the ritual was parodied, and Melancthon, one of Luther's most ardent supporters, along with others proceeded to celebrate the Lord's Supper and administer the communion, the wine as well as the bread, to himself.

With the further developments of Protestantism in Germany and the north we are not concerned. Suffice it to say that Scandinavia had been Lutheranized in the first half of the century, though in Sweden it was not officially established till 1592. No less early, Protestantism had firmly established itself in Switzerland, under Zwingli, and had set up under Calvin a theocracy at Geneva, marked by the burning of the "heretic" Servetus, who expressed anti-Calvinistic and anti-Trinitarian views. It got temporarily a strong enough hold on France to provoke civil war and win toleration for nearly a century only to be proscribed for another hundred years by the revocation of the Edict of Nantes (1685). It became part of the struggle for freedom of the Netherlands against Spain, and, thanks to William of Orange, it was partly cleansed in the Low Countries of the intolerance which so often marked its spread elsewhere, and became synonymous there with truer liberty of religious thought and expression.

Crossing the Channel, we find Calvinism transported from Geneva to Scotland by John Knox. In England the Reformation was more political than religious, fostered as it was by the Crown's resentment of the Roman control of the clergy, and precipitated by the determination of Henry VIII to divorce Catherine of Aragon and to marry Anne Boleyn. In 1534 the Anglican Church was formally declared independent of the Roman. But the revolt against Roman doctrine, ritual, and practice was moderate, and without Lutheran entanglements or such iconoclastic excesses as marked some other aspects of the Reformation.

The Reformation and Freedom of Thought. The cause of freedom of conscience, thought, and speech had, however, even less to hope at the moment from the Reformation than it had from the Church. The Reformation was far more hostile in spirit to the liberating in-

fluences of the Renaissance. Indeed, a part of its quarrel with the Catholic Church lay in what it considered the "paganizing" of Catholicism by the new culture. Nor did its rejection of the authority of the Church involve any immediate liberation of philosophical speculation from Christian doctrine, or make the way of the free thinker easier. Persecution grew with the same vigor in Reformed as in Catholic soil, and woe to the individual who aired any doctrinal differences from the tenets of the Protestant sect under whose domination he happened to find himself.

But, indirectly and in the long run, the Reformation was of great service in establishing and ensuring the liberation of philosophical speculation from subservience to religious dogma. Its insistence on the right of the soul to immediate access to and communion with God, without benefit of clergy, forced eventually the recognition of the right of every man to think as he chose, without interference, in matters religious and philosophical. And its equal insistence on the depravity and sinfulness of the natural man and of his complete dependence upon divine grace for salvation was instrumental in provoking the great reaction of the eighteenth century in favor of the essential goodness of the human soul. The literalness with which it took the Scriptures could not but provoke skepticism regarding not merely the content but the fact of revelation, and the substitution of sectarian dissensions for the pondered dictum of Rome was calculated to bring any and every assertion of the authority of theology over philosophy into disrepute. Then, too, the power of authority to impose itself was weakened by division, while the general uproar of the battle between Catholic and Protestant and of Protestants with each other aroused the mind both to a renewed interest in philosophic problems and to thinking independently of theological restrictions.

The Reformation and the Renaissance. In these respects the Reformation reinforced the liberating work of the Renaissance and helped re-establish the worth and the dignity of the natural man, his ability to work out his own salvation without supernatural help, and his capacity for seeking and attaining truth by the exercise of his native reason without recourse to revelation. So, too, in the long run, it fostered freedom of thought and speech and contributed to the rescue of philosophy from her thousand years of bondage to Christian dogma. However, before noting the revival of comparatively free philosophic speculation, we must pause to consider the housecleaning within the Church of which the Reformation was not, indeed, the cause, but

may have been, in part, at least, the occasion. Let us, then, glance at the Counter-Reformation.

II. THE COUNTER-REFORMATION

First Attempts at Reform Within the Church. Before Luther's attack upon the laxity into which the Church had fallen, pious Catholics were showing their alarm over her condition. In Spain, where religious practice was peculiarly passionate and severe, under Ferdinand and Isabella and the great Cardinal Ximenes the Inquisition was established, the monasteries were reformed, discipline was imposed upon the clergy, and the study of Aquinas was revived. The Mohammedans and Jews were expelled from the country, and the measures were initiated that ended a century later in the banishment even of those infidels who had been prudently converted to Christianity.

But this rising tide of reform was not destined to engulf Italy as yet. To be sure, Leo X, in whom the spirit of the Renaissance had been momentarily enthroned in the chair of St. Peter, and under whom the Reformation had broken loose, was succeeded by Adrian VI, who had been tutor to Charles V and co-regent of Spain with Ximenes during the Emperor's minority, and later Inquisitor General. He was an earnest and pious man, who, called to account by the Lutheran catastrophe, made, so to speak, a plenary confession of the sins of the Church. But he was too weak and too short-lived a Pope to do much to correct them. To him, however, came Loyola for the commission that established the powerful Jesuit order, which increased its numbers with astonishing rapidity and did much to restore ideals of learning and discipline to Catholicism and to help it resist Protestant undermining.

The Sack of Rome and the Council of Trent. It needed, for all that, the political disorders under Clement VII, the sack of Rome by the troops of Charles V, and the threat of the secularization of her territories to bring the Church to a full realization of her sins, for which her tribulations were now regarded as divine punishment. She was shocked into pulling herself together and setting her house in order once more. By the middle of the sixteenth century she was able to face the world again at the Council of Trent with a conscience cleared in many respects of the charges hurled against her. She overhauled her discipline and administration, started the index of prohibited books, revised the missal and the breviary, prepared a catechism for the use of the priesthood, proclaimed the supremacy of the Pope, thus

helping clear the way for the eventual proclamation of his infallibility, decided various points of doctrine, and presented a unified and bold front to the Reformation which enabled her to shift from the defensive to the offensive. The more fundamental abuses were, indeed, passed over for the most part, but the machinery had been set in motion for their eventual correction.

Divine Grace and Molinism. Meantime the question of the place of divine grace in the scheme of salvation, which the Reformation had brought to the fore, was agitated once more in Catholic circles. The Thomists stood by the doctrine of Aquinas, who had accepted the Augustinian teaching but applied it with moderation and common sense. Even so, it seemed too severe to the Jesuits. A member of the order, Louis de Molina, invented the doctrine known after him as Molinism, which pictured the average man as free and able to perform of himself a set of ordinary duties, for whose omission he was therefore responsible. God was sensible and did not expect too much of human nature, and hence should be met half way. Since God was reasonable and man was free, failure to fulfill one's moral obligations could not be put off by the excuse that God was too harsh or man too weak. Moreover, in perplexity the individual had only to appeal to his spiritual adviser for instruction as to what his duties were and how best to perform them. There was no need for too much introspection and soul-searching. The priest was a kind of doctor, who could tell him how to keep his spiritual health and how to restore it when it had been impaired by some moral imprudence.

This view carried on the Catholic tradition in ethics, and its prescription of recourse to spiritual advice and to the confessional served both as a prophylaxis and a remedy against too great moral perplexity, anxiety, and remorse. Still, the Jesuit doctrine invited grave abuses. Seeking, as Aristotle thought the judge should do, to modify the generality of the law to fit it to the particular case, the spiritual adviser was only too likely to find himself informing his charge as to just how far he could go without getting into difficulties. Or he became like a doctor who, instead of laying down the rules of health and prescribing cures for disease, should make it his chief business to enumerate the liberties the patient might probably take with his particular constitution without doing it too much harm.

This is not to say that much advice of this sort is not part of good counsel. The lawyer points out what the law permits as well as what it forbids. The doctor does his best to combat an excessive amount of precaution in his patient. The wise spiritual adviser warns against

exaggerated conscientiousness, as well as against lack of scruple. But in excess, and too much to the exclusion of all else, such advice becomes vicious. In the mouths of the Jesuits it tended to establish a minimum standard of conduct and quantity of virtue necessary to absolution and salvation, and exposed them to the reproach of *casuistry*.

Jansenism. We ought not to take leave of the Counter-Reformation without mentioning its aftermath of Jansenism; all the more as the Jesuit practice, and particularly the outlook on human life inspiring that practice, played an important part in originating the movement. Jansen (1585-1638), Bishop of Ypres, complained, like the Reformers, of the tendency of the Church on the one hand to fall into formalism both in thought and worship, and on the other of the too lenient view she took of man. Like Luther and Calvin, he reverted to Augustine for inspiration, and insisted on the essential depravity and helplessness of the soul since the Fall, and on the uselessness of mere works unless they were accompanied by an acceptance of God's saving grace and by a conscious and fervent love of him. The implications of the Jesuit attitude, that man was a free agent capable of availing himself of the salvation proffered by Christianity, without determination thereto by the divine will, was abhorrent to him. At the same time he himself hesitated before the implications of predestination, and refused to set limits to the divine mercy or absolutely to cut off the most recalcitrant sinner from all hope of salvation. Furthermore, he rejected the Protestant doctrine of justification by faith. To be saved, a man had to do more than call upon the Lord Jesus Christ; he must justify that call by a long and arduous process of Christian living.

Jansen was as opposed to the Reformation as he was to what he considered Catholic laxity. Salvation was possible through the Catholic Church alone. But in spite of his submission to the Catholic faith, his views, which became the subject of a long and bitter controversy with the Jesuits, got him and his disciple Arnauld into difficulties. They were condemned by the Church, and for the next century the Jansenites were subjected to almost continuous persecution and were all but stamped out.

Chapter III

CONTINENTAL PHILOSOPHY TO DESCARTES

I. THE ITALIAN NEO-PLATONISTS

We may remember that prior to the fall of Constantinople a Platonic Academy had been founded in Florence, that among the Byzantine refugees there were adherents not only of Plato but of Aristotle, and that the old conflict between the Platonists and the Aristotelians broke out afresh. It was, however, now carried on with a difference. The contestants were not so strictly umpired and held to order by the Church, and had at their disposal the original Greek texts of the two philosophers. So it was a new Plato and a new Aristotle that entered the ring.

Marsilio Ficino and Pico della Mirandola. The emergence of the re-discovered Plato in the authentic Greek created comparatively little disturbance. He inspired Marsilio Ficino (1433-1499) to undertake a new translation of his works, which was quickly followed by the first translation of the complete works of Plotinus into Latin. Like the Medieval Platonists, Ficino was still able to find in Plato a philosophic prop for Christianity, designed to convince the intellect by rational argument of the truth of revelation, which, following the Platonic tradition in the Church, he regarded as essentially reasonable. Thirty years younger, Pico della Mirandola, a student of Plato and the Neo-Platonists, was captivated also by the mystical, esoteric teachings of the Jewish Kabbala in which Pythagorean, Neo-Platonic, and Gnostic ideas were fantastically fused with symbolism and allegory. Under the influence of this "theosophy," which sought to penetrate the mysteries and grasp the occult forces of nature and to lift the veil from the face of God, Pico embarked upon a Christian mysticism which found in the Kabbala a key to the arcana of revelation. But like Ficino, he managed to confine his speculations within the limit of orthodoxy.

II. ALCHEMY AND PARACELSUS

Impregnated, also, by the new scientific hope of controlling nature, this mysticism turned to magic spells and incantations as a means of forcing her to comply with human desires. Her occult powers were invoked, spirits good and evil were summoned, even the dead were raised to impart knowledge of her secrets and to endow man with the power to utilize them. Great expectations were aroused of finding the philosopher's stone able to turn the baser metals into gold, and of discovering fountains or manufacturing elixirs, to drink of which would restore youth to the old, or confer upon young and old alike the power to live forever. Fantastic as these speculations and researches were, they took, in alchemy, the first steps towards modern chemistry.

Paracelsus. Alchemy found its most famous exponent in Paracelsus (1493-1541). A Swiss by birth, an omnivorous student, an indefatigable traveler, and a doctor by profession, he spent most of his life a wanderer, hounded from one place to another by the suspicions he aroused. His medical ideas were revolutionary. They broke entirely with the great authorities of the past and were bitterly critical of contemporary medicine. His concept of the field and method of medicine was far ahead of his time, but his system was so infected with alchemy and magic that, except for his perception of the natural propensity of the body to cure itself, and of the use of chemical preparations as drugs, it advanced very little upon the theory and practice it denounced.

The Nature of God and the Universe. Not only, however, was Paracelsus under the spell of magic, alchemy, astrology and the like, he had a philosophy typical of the mysticism and magic generated by the commerce of Neo-Platonism with the new scientific interest. God is the first cause and essence of all things. The Father is the center, the Son the radius, and the Holy Ghost the circumference of the divine being. Creation is the self-expression of the divine will, and takes place by a process of division of the divine essence and by a multiplication of creative principles. First to appear is chaos or matter, the formless substratum of which all things are made. Within this the four elements are separated out, and of them all individual things are composed.

But these principles are not dead. They are infused with life and spirit. The whole universe, therefore, is animate; as a whole and in every minutest part. Everything—be it astral, terrestrial, animal, vegetable, mineral—has its spiritual principle, and its particular soul-forms

or invisible living beings inhabiting it. These soul-forms are intermediate between pure spirit and matter, and are embodied in an ethereal matter.

Man and the Universe. Man is the culmination of the process of creation, and in him are concentrated all the forms and forces that go to make the world. He is in miniature (microcosm) what the universe is in its entirety (macrocosm). His mind is part of the universal mind. His soul is akin to the soul-form of the stars, and is clothed with an invisible astral body. His terrestrial body is composed of the four elements and contains within itself the whole essence of primordial matter. It follows that he is *en rapport* with the whole of nature and potentially in possession of all her secrets and master of her hidden forces. These he may learn to penetrate and to utilize by the study and the practice of magic and alchemy. By tapping the hidden resources of the spirit, he may manipulate the soul-forms of all things, utilize the influences of the stars, reconstitute astral bodies, summon the souls of the elements, and even of human beings, transmute the elements, heal the sick, and perform many other wonders.

Such magic, Paracelsus protests, is not sorcery. It is white, not black. It is the practice of powers given man by God for his salvation, not lent him by the Evil One to ensure his damnation.

III. THE NEW ARISTOTELIANISM AND POMPONAZZI

We have noted that the recovery of the "real" Plato and the "real" Neo-Platonists revealed nothing shockingly inconsistent with the traditional Platonism and Neo-Platonism of the Church. The case was different with Aristotle reintroduced in his true guise. Re-read in the original Greek, he proved different from the Aristotle upon whom the Church had so long pinned her faith.

Aristotle on Immortality. Pomponazzi (1462-1525), doctor of medicine and professor of philosophy at Padua and Ferrara, argued that a reading of the original texts quite disproved the assertion of Aquinas and the other Scholastics that Aristotle's teaching supported the immortality of the soul. The case was quite the reverse. Nay more, Pomponazzi began to have doubts of his own in the matter. He rejected as superstitious and derogatory to the nature of good men the so-called proofs of immortality based upon the contention that, if God is to be justified and a moral government of the world vindicated, there must be a future life in which the rewards and punishments, so notoriously lacking here below, are at last meted out. Virtue is its own reward,

vice its own punishment. There is then no moral need of heaven or of hell. Nay more, such concepts are detrimental to true morality, since to be virtuous from fear of hell or hope of heaven is not to be truly virtuous.

Aristotle and Christian Doctrine. Such doubts bred others no less serious. Turning once more to Aristotle in the Greek, he found there no warrant for the idea that there can be interferences with the natural order, or in other words, for the occurrence of miracles. So, too, Aristotle is a broken reed to lean on when it comes to reconciling God's precise foreknowledge of what is to be with his purpose to bring things to pass and his providential direction of their course, not to speak of reconciling a providential government of the world with human free-will. Aristotle re-read is no less at sea in these matters than the theologians who looked to him for support.

To have this illusion shattered about one who had so long been her official guide, philosopher and friend, was bad enough. But it was adding injury to insult to have him publicly quoted in opposition to a cardinal article of her faith like immortality. So it was that Pomponazzi was haled before Leo X and charged with heresy. He exculpated himself by the device of the two-fold truth. He believed, he said, in immortality because the Church asserted it.

But the real Aristotle had been too thoroughly exposed to be again ecclesiastically fig-leaved. Pomponazzi's opinions continued to be held, discreetly half-veiled for the most part by the same subterfuge, but so shamelessly by Vanini (1584-1619) that he fell into the hands of the Inquisition and was burned at the stake.

IV. RECRUDESCENCE OF PANTHEISM AND NATURALISM

Meantime, the Aristotelians and the Platonists were beginning to compose their differences in a way that led towards pantheism, and the scientific movement was fast unfolding into a full-blown naturalism and mechanicalism. Both these tendencies were accelerated by the possession and translation of the original Greek texts of the early Ionian philosophers and of the Stoics and the Epicureans, not to speak of the publication (1544) with Latin translation of the works of Archimedes, of which Leonardo had read the manuscripts. Their first fruits were Caesalpinus, the botanist, who evolved a pantheistic system along realistic rather than the usual mystical lines, and Telesio (1508-1588), who tried to reduce the entire universe to matter acted upon by the expanding and contracting forces of heat and cold. The cele-

brated physician Cardano (1501-1576), the candor of whose autobiography is a monument to the freedom of the Renaissance from hypocrisy, was on his way working towards a naturalistic theory of evolution.

V. FIRST FRENCH AND GERMAN PHILOSOPHY

In France the first philosophical repercussions of the Renaissance were negative rather than positive, inspiring as they did Montaigne (1533-1592) to a generally skeptical attitude. Nevertheless, Montaigne's self-analysis, to which his *Essays* are admittedly devoted, make him one of the founders of introspective psychology.

The renewed commotion caused by the fall of Constantinople was carried by Reuchlin (1455-1522) to Germany. He had studied under Pico della Mirandola at Florence, and was thoroughly imbued with his master's enthusiasm for the Kabbala and conviction that it contained the key to the mysteries of the Christian faith. He devoted himself to the study and teaching of Hebrew, and was at one time or another professor at Tübingen, Stuttgart, and Heidelberg. But his pro-Semitic sentiments kept him in continual hot-water, and he was always moving on. Thanks, however, in part to him, the way was prepared for the Protestant Reformation.

The great northern figure of the Renaissance was, however, the Dutch scholar and priest Erasmus (1466-1536). Well-versed in Greek, he helped edit and translate into Latin many of the Church fathers, and his famous edition of the Greek New Testament revealed the inferior and often false translation in the Latin Vulgate, which was used and regarded as authentic by the Church. Endowed with a keen wit and a sarcastic tongue, he lashed out at the ignorance, the greed, and the corruption of the priesthood and the monasteries. But for the violence of Luther, his somewhat younger contemporary, he had as much contempt as he had for stupidity within the Catholic fold. Nor did he spare the civil authorities. His equal antipathy to the abuses of the Church and to the excesses of the revolt against them, and his unwillingness to be drawn into the quarrel, gained him the ill-will of both parties, which, however, never jeopardized his safety or even curbed the freedom, the frankness, and the barbed wit of his speech.

VI. GIORDANO BRUNO

Life. Returning to Italy, the next philosopher on our list is Giordano Bruno. Born near Naples in 1548, he appeared upon the philosophic

scene late enough to be influenced not only by the Neo-Platonic mysticism, the new Aristotelianism, and the pantheistic and naturalistic speculations which had accompanied the Renaissance, but also by the revelations of the new astronomy regarding the nature of the physical universe.

He began his career as a Dominican monk, but soon became skeptical of the Catholic faith. Protestantism he found no more satisfactory. The restlessness of his disposition, and his hostility to Catholic and Protestant alike, kept him moving, suspected by the religious authorities wherever he went. In Paris, he might have had a professorship but for his refusal to attend Mass. Crossing to England under the protection of the French Ambassador, whose friendship he had gained, he spent two years in London and Oxford, but was disgusted with English manners and with the narrowness and pedantry of university life. Returning to France, he was forced by his enemies to flee the country. For a while he wandered in Germany and Switzerland. In 1593 he was so foolish as to accept an invitation to visit in Venice, where he had already published some of his books. The Inquisition promptly snapped him up. After a long imprisonment in Rome he was burned at the stake in 1600 in the Campo de' Fiori, where recently a statue of him has been erected to commemorate his martyrdom.¹

Oneness of God and the Universe. As we have said, Bruno was captivated by the new astronomical vision of the universe, which he accepted without misgiving or reservation. He was also influenced by Nicholas of Cusa and by Telesio, as well as by Lucretius, the Stoics, and the Ionian philosophers. Let space be infinite, he cries, let there be an infinite number of universes, let man be infinitesimal, let there be no Paradise beyond the stars, tenanted by God and his angels. Reality is all the more sublime. God and the infinite universe are one and the same thing viewed under two different aspects. We call it God, when we think of it as the all-inclusive unity, the one thing from which all things spring and in which they all live and move and have their being. We call it the universe when we think of the infinite number and variety of manifestations, which, in its division into many particular things, the one all-inclusive thing assumes. To express this difference of perspective, Bruno uses the terms *natura*

¹ The chief works of Bruno are *Della Causa, Principio ed Uno; De Monade, Numero et Figura; De Triplici Minimo et Mensura; De Immenso et Innumerabilibus*; and an allegory entitled *Spaccio della Bestia Trionfante*, in which Christianity is attacked and the Old Testament stories are placed on a par with the fables of Greek mythology.

naturans, or creative nature, and *natura naturata*, or created nature. These terms were later adopted by Spinoza to denote essentially the same distinction.

Monadic Character of the Universe. Also, in emphasizing the one and indivisible character of the universe in its role as creative nature, Bruno employs the word *monad*, suggested perhaps by the Atomists and Cusa, which we shall find also figuring in Leibnitz' system. God is the monad of monads, the principle of unity which also displays itself in the unified character of individual objects, each one of which repeats and reflects, in the unique and unreduplicated nature of its particular being, the oneness of the Reality of which it is a part. We may also, if we like, speak of God as the *stuff* or *matter* of all things, since he himself provides the possibilities that he actualizes, and is the origin from which all things spring, the substratum in them which persists unchanged through all their changes, and the principle into which they are eventually resolved.

Creation is the unfolding of the divine essence, the displaying of the nature of things. Being determined by the nature of God and nothing else, it is a process in which the opposition between freedom and necessity is meaningless. God reveals himself in the system of laws and relations that bind all things together, and in the endless wealth of types and individuals embodying those types, entering into those relations, and exemplifying those laws. He is equally present in all things. He is all things. And yet he is more than their sum. He transcends each and all, and his nature cannot be described by such terms as law, or substance, or type, or kind. He is ineffable.

The Nature of the Mind. The outgoing of God from himself which develops him into an infinite plan and panorama and kaleidoscope in space and time, culminates in the human soul. In mind the nature of God achieves its most complete expression. But if God is as truly intelligent and living as he is material, then there is some portion of life and intelligence in everything. Mind, moreover, represents the end of God's outgoing from himself, and a reverse movement of withdrawal into himself. Our thinking and philosophizing and striving after truth are a movement away from the multiplicity, the variety, the change, and the motion of God as manifested in the world to the unity, the simplicity, and the unchangeableness of God as he is at heart.

Man, standing as he does at the point where the process of withdrawal and of thinking emerges from the process of outgoing and

of physical evolution, in which it has hitherto been latent, is a privileged being. He occupies a position midway between God as *natura naturans* and God as *natura naturata*. At death he may hope that his soul will still be carried on the current of God's return into himself, of which her activities have been a part, and that she will eventually become one with *natura naturans*, rather than be swept away in the outgoing stream of change, of which the dissolution of the body is an incident, and lapse again into *natura naturata*, into new forms of which beings of undeveloped soul are resolved when they are destroyed.

Bruno's Break with Christianity. Bruno's system, though founded on the new scientific discoveries, has much in common with the mystical philosophies of Eriugena and Meister Eckhart. It is interesting to note, however, that there is no attempt to square Christian theology with it; no endeavor, for instance, to make it explanatory of the doctrine of the Trinity, after the fashion of the Christian mystics. Bruno had broken too completely with his early faith for that. He did indeed use his distinction between *natura naturans* and *natura naturata* to defend himself against the charge of atheism. He loved to describe himself as "God-loving," just as Spinoza, who, as we shall soon see, resembled him in many important respects, was called "God-intoxicated." But with Christianity he would make no compromise. His is the first important system boldly and without subterfuge to defy the theological restrictions to which philosophy had so long been subject. It marks the definite breaking of the thousand years of bondage. Philosophy was no longer the handmaid of Christianity. She was once more her own mistress, free in spirit, though she still had to fear persecution, to think and to say what she chose. Henceforth she was to defend this liberty against all comers with a conscience cleared of theological qualms.

VII. TOMMASO CAMPANELLA

Certainty That the Self Exists. In the early years of the seventeenth century a number of widely different philosophic movements were in progress. The Italian Campanella (1568-1639), though a devout Catholic and a Dominican monk, was nevertheless disgusted with Aristotle, and attracted, as Bruno had been, by the naturalism of Telesio. Sharply differentiating the philosophical results of reasoning from the truth vouchsafed by revelation, he proceeded to work out a system

which in some respects anticipates Descartes.² Our senses, he points out, deceive us, and hence their seeming reference to an external world and the account they give us of its nature cannot be trusted. Nor can any reasoning founded on their reports give us certain knowledge. The only trustworthy feeling that I have is that of my own existence, and the only knowledge I can obtain must be acquired by reasoning out its implications.

The Self and God. As certain as my awareness of my own existence, is my consciousness of that existence as part of a larger whole. And I can argue with assurance that this larger reality, which includes and limits me, is the cause of my sensations. I can also argue that, since my consciousness is a part of Reality, it must be representative of the nature of the Real. I find that I myself am a unity possessing power and will and knowledge in limited degree. Therefore, the whole of which I am a part must be a unity possessing these attributes completely. Therefore God exists.

However, there must be other degrees of imperfect manifestation of God's nature besides my own. Above me and more godlike is the hierarchy of the angels. Below me and further removed from God is the corporeal world. But this, again, exhibits different grades of perfection. Nearest to reason, human and divine, comes the intelligible or mathematical plan of the universe. Below this is the world of bodies embodying that plan, and finally we have the superficial, sensible order of the moving, changing phenomenon produced by these bodies. Since, however, all these worlds are progressive degradations of the qualities exemplified perfectly by God, knowledge, power, and will are present to some degree everywhere.

The love of God and the desire to return to him, which are the essence of religion, are correspondingly omnipresent. The inertia of physical bodies, the tendency to persist and to resist destruction, is a kind of religion on their part. So, too, is the instinct of self-preservation in animals. Finally, there is the religion of reasonable beings who consciously love God, seek to know him and to do his will, and to unite themselves with him.

The Ideal Commonwealth. In his work, *The City of the Sun*, Campanella constructs an ideal commonwealth. His vision is drawn largely from Plato, and incorporates the community of property and wives, the state control of human breeding, the military training, and the pro-

² For Campanella's philosophy, cf. his *Universalis philosophiae sive metaphysicarum rerum juxta propria dogmata partes III*, particularly Part I.

visions for educating a guardian class entrusted with supervision of the lives of its citizens, advocated in *The Republic*. He was also an ardent champion of the supreme authority of the Pope, not only in religious but in temporal matters. In fact, he exalted the sovereign pontiff to the position of political king of the whole world. The arguments of Campanella bear interesting witness to the bitter struggle of the Church at the time to assert her authority over Catholic rulers. The attempted exercise of such dominion had already provoked the separation of the Anglican from the Roman communion, and the issue remained a constant source of irritation in France for centuries.

VIII. JAKOB BOEHME

God Felt Not Known. In Germany, this time under Protestant and Lutheran auspices, Jakob Boehme (1575-1624), a poor shoemaker of Görlitz not far from Prague, voiced another great outburst of Christian mysticism, in the mode of Eriugena and Meister Eckhart. His thought is difficult to fathom, as, in addition to the obscure style in which it is set forth, it changed from time to time. We may, however, describe its essentials as follows. It is not the head but the heart that finds God. God is felt, not known in the sense of being grasped and defined by reason. To feel him we must merge ourselves in his Holy Spirit and abandon ourselves to its ineffable revelation of the divine nature.

So experienced, God is the abyss, the boundless, at once the Nothing and the All. In the depths of his being moves blind, primordial will, the Father from whom all things proceed, groping after self-expression, and finding its fulfillment and manifestation in the Son, who is the will become conscious of itself and of its goal, and enlightening itself with this consciousness. From the interaction of this blind, outgoing energy and of its reflection upon itself, springs the World-Soul, the Holy Ghost, the Lord and Giver of life.

God the Creator. God is now aware of himself as creative, as entertaining an abstract and still virgin and unproductive plan of creation, or wisdom, and as a living source of possible further life. This plan must be realized and turned into a living being, if God is to become completely self-conscious, since self-consciousness involves a contrast of one's self with something recognized as not one's self. Therefore the life of God is a ceaseless striving to impregnate the virgin and as yet barren form of creation. It is a travail to bring forth the universe, to incarnate the Son, to give embodiment to the life which is the Holy

Ghost, in order that God may have something besides himself to know and love, and may thus experience the full meaning of love and knowledge.

From this travail and this divine agony are born the worlds, which repeat the nature of the Trinity, in the conflict of outgoing expansion and ingoing contraction and of the natural energies and motions springing from their battle. Through this conflict nature in her turn becomes half-conscious of herself and of her goal. Her aim is to overcome the struggle of opposing forces and to produce out of them new levels and crystallizations of existence, just as the divine travail, engendered by the outgoing and the ingoing will, brought her forth. The Incarnation and the Passion of the Son must lead to his Resurrection. Complete self-consciousness must arise in nature even as it does in God. This takes place in man, whose free will stands over against the divine will, and may oppose it or be harmonious with it.

The Relation of Man to God. But the creative operations of nature, it will be observed, involving as they do a stilling and a stabilization of the battle of opposing forces, are also returns of nature towards the primordial unity of God. In their way they are acts of self-abnegation, of submission to the primal will, which both underlies and is above the conflict. This submission becomes complete when man freely resigns his own will to the divine will and consequently identifies his separate self with the one that is higher and deeper than will itself.

Such resignation brings with it a more profound insight than that of reason. Reason reveals to us only the barren virgin, the empty form of the universe, grasped by an outgoing act of knowledge towards an external object. But with the resignation of the human will to the divine, comes a mystical, immediate, inner *understanding*, as Boehme calls it, of the very heart of God.

This understanding, however, is not passive. Neither does it withdraw the soul from life, or obliterate her distinction from God. On the contrary, it is active and creative, and in its light the soul repeats within herself the divine process of creation, projecting and incarnating the image of her own self-fulfillment, and bringing forth a life all the richer and more abundant for the struggle that constitutes it, and a triumph all the sweeter for the battle by which it is won.

The Problems of Evil and Free-Will. Here we have perhaps the thought underlying the various attempts that Boehme makes to work the origin of evil into his scheme. He began, apparently, by simply dramatizing it, under the allegory of the fall of Lucifer, as incidental

to the fundamental division of the will and to the conflict of God with himself that inexplicably occur within the abyss. Later, apparently feeling that he had thus made God morally responsible for evil, he tried to justify its existence by invoking the conflict and interdependence of contraries which are a necessary condition of the existence of the universe. Finally, he seems to have fallen back upon the argument that God introduces evil into the world as a foil against which to make his glory, his goodness, and his mercy the more manifest.

The same vacillation appears in his treatment of the problem of free-will. Sometimes he regards the existence of opposed and struggling wills, each one of which is not only pitted against the others but is divided against itself, as a primary manifestation of the nature of the primordial will. At other moments, he looks upon individual freedom as expressly created by God to provide himself with other wills to love or hate, and thus to complete his own consciousness of freedom.

But whatever the part played by evil and by man's free will in the life of God, their part in human life is plain enough. It is incumbent upon man to ally himself with light against darkness, with good against evil, and, since he is a free agent, he is responsible for his choice. His life, then, is truly his own to make or to mar, and his creation of himself is as original, as spontaneous, and as profound, as God's eternal act of self-creation.

IX. PIERRE GASSENDI

Revival of Epicureanism. In France, meanwhile, within the Catholic fold, the Epicurean atomic theory and a modified Epicurean ethics were being revived by Pierre Gassendi (1592-1655), mathematician, scientist, and priest. Early in life he fell under the influence of the anti-Aristotelian movement in France, fostered in the sixteenth century by the logician Ramus, and became interested in the discoveries of Galileo and Kepler. He inclined, also, as far as the restraints of his religion would permit him, to the empirical view that the intellect is wholly dependent upon the senses for information, and that reasoning can do no more than work over the material they present. In these circumstances it is not surprising that he found Epicureanism the most congenial of the ancient philosophies.

His work consisted largely in re-writing Epicureanism, not indeed as a metaphysics, for he deals severely with the Epicurean theory of

the gods and accepts without questioning the whole Christian and Catholic background of the universe, but as a logic, physics, and, with some reservations, an ethics. His revamping of the atomic theory of the nature of matter and his empirical theory of knowledge brought him into bitter controversy with Descartes. In his ethics he defends the Epicurean theory that pleasure is the good. It is the natural end at which all sentient beings aim. It is not opposed to virtue, but is rather the crown and the sign of a well-lived life. Nor is hedonism a selfish doctrine. Nature, indeed, instructs us to pursue our own pleasure, but in instructing us she also implies that we should love everything from which we naturally derive pleasure—our family, our friends, the human society of which we are a part.

Freedom of the Will. Finally, like the Epicureans, Gassendi defends the freedom of the will against determinism. There can be no gain-saying the feeling of freedom. We are directly aware of being able to choose. But, whereas for them the problem was to work freedom into the mechanical theory of the movement of the atoms proposed by Democritus—which they did, we may remember, by endowing the atoms with a spontaneous deviation from their perpendicular fall through space—for Gassendi the difficulty was to reconcile freedom with God's foreknowledge.

Chapter IV

EARLY ENGLISH PHILOSOPHY

I. ITALIAN INFLUENCE ON ENGLAND

We may remember how the spirit of the Renaissance had been introduced in England early in the fifteenth century by Humphrey, Duke of Gloucester, a son of Henry V, himself a collector of classical manuscripts, a patron of learning in touch with Italian scholars, and a powerful influence in the revival of learning at Oxford. From his time on, there was an increasing migration of English scholars to Italy, who returned imbued with the ideals and the results of the new learning. Humphrey's nephew, Henry VII, was friendly with the Dukes of Ferrara and Urbino, and an admirer of Italian culture. He took many Italians into his service, and during his reign the ideal of the all-round man, pictured by Castiglione in *The Courtier*, became fashionable with the English nobility. Italian masters of the many arts were imported, Italian literature was studied, and Italian became the polite language of the day and was habitually used at the court of both Henry VIII and Elizabeth.

There was also an immigration of Italian artisans and artists, merchants, and bankers, and the influence of Italian commercial knowledge and methods is still remembered in terms like cash, bank, bankrupt, and ditto, and the signs *£. s. d.*, derived from *liri, soldi* and *denari*. The political ideas of Machiavelli were also whispered in the ears of English statesmen, and were listened to by Wolsey and later by Cromwell. The effect of Italian upon English literature is notorious, and dates back to Chaucer. Petrarch was much admired, and the sonnet-form was introduced into English poetry. Spenser was under the spell of Ariosto and of Tasso, and Shakespeare found in Italy the inspiration for some of his plays.

Sidney and More. The Italian ideal of universality received English incarnation in Sir Philip Sidney, handsome, brave, soldier, courtier, traveler, humanist, acquainted with the new science, well versed in French, Spanish and Italian literature, and himself a stylist in poetry and in prose; also, more philosophically, in Sir Thomas More, admirer

of Pico della Mirandola, a lover of music, and of learning, an omnivorous reader and brilliant conversationalist, author of *Utopia*, and a brave and conscientious opponent of Henry VIII in the matter of the divorce of Catherine of Aragon—a daring that brought him to the block.

In the *Utopia*, More is prophetic of many social and economic changes some of which have come to pass, others of which still await realization. He dreamt of compulsory education, laws regulating labor, improvement in housing and lodging, the prevention rather than the punishment of crime, and the tempering of punishment to suit the offense. He also advocated religious toleration and liberty of conscience, and advanced the idea of a natural religion to supplement Christianity.

The Cambridge Platonists. A century later the same Platonic and Neo-Platonic influences that produced della Mirandola and Ficino in Italy, and through them Sir Thomas More, helped produce the little group of Platonists at Cambridge, of whom Henry More and Cudworth are the best known. These men were liberals in thought, who endeavored by the aid of Plato and Plotinus to rationalize religion, and at the same time to imbue it with Platonic and Neo-Platonic mysticism. They endeavored to revive the Platonic Ideas in the shape of eternal and immutable principles of reason and of morality, and Cudworth went so far as to resurrect the Platonic World-Soul in his concept of the "Plastic Medium" to whose operations the natural world was attributable. Henry More was even more mystical, and turned to Neo-Platonism more than to Plato himself for his inspiration. But the movement was not only an echo of the Platonism of the Renaissance. It was more directly a reaction against the naturalism, also a product of the Renaissance, which had already seized hold of Francis Bacon, and at the moment had Hobbes in its grip. To these philosophers we must now lend an ear.

II. FRANCIS BACON'S LIFE AND CHARACTER

Rise to Power. Francis Bacon (1561-1626), the son of Sir Nicholas Bacon, Lord Keeper of the Seal under Elizabeth, was born with a silver spoon in his mouth, through his kinship to the great Cecil family. Graduated from Trinity College, Cambridge, in 1575, he studied law, entered politics, and became a member of Parliament, thanks in part to the patronage of the Cecils and Walsingham and the Earl of Essex. Under James I his preferment was rapid. Attorney

General in 1613, Lord Keeper of the Seal four years later, Lord Chancellor in another twelvemonth, he was raised to the peerage as Baron Verulam in 1618, and in 1621 was created Viscount St. Albans.

Fall and Retirement. But Bacon was not an altogether admirable character. He had always been something of a toady and a time-server, and his willingness to prosecute his former friend and patron, the Earl of Essex, who had fallen into Elizabeth's disfavor, was little short of treacherous. As Lord Chancellor he was accused of accepting bribes and of corruption in the conduct of his office. A Parliamentary investigation was held, and Bacon confessed to irregularities. He was deposed from office, given a heavy sentence both in fines and imprisonment, most of which, however, was suspended. But he was barred from Parliament and temporarily banished from court. He returned to his country estate at Gorhambury for the few remaining years of his life. The story of his death is well known. Being interested in the problem of preserving meats by the application of cold, he got out of his carriage one day to gather snow with which to stuff a chicken. He himself caught pneumonia, but as he himself wrote on his death-bed, "The experiment succeeded, excellently well."

Bacon had, however, the virtues of his vices. His cool, prudent, dispassionate, time-serving and ungenerous nature, which proved his moral undoing, was favorable to the realism, the patience, the perseverance, and the dogged experimentation, upon which his enunciation of scientific method was founded.

Works. Throughout his political career as well as after his retirement he pursued his scientific and philosophical interests and wrote and published almost continuously. By some people he is credited not only with the works bearing his name, but with having also composed what we are accustomed to call the plays and poems of William Shakespeare. His *Essays*, published in 1597, gave him an immediate literary popularity, and remain one of the masterpieces of English literature. Among his other works we may mention the *Advancement of Learning* (1605), published first in English and later in enlarged form in Latin; the *Novum Organum* (1621), of which a preliminary sketch entitled *Cogita et Visa* had appeared in 1607; and various scientific essays, which, along with the *De Augmentis Scientiarum* (the Latin version of the *Advancement of Learning*), the *Organum*, and other works projected but not written, were designed to form a comprehensive project to be known as the *Instauratio Magna*. Besides these we may mention the *New Atlantis*, in which Bacon describes his

political utopia, the *History of Henry VII*, and the *Apothegms*, which is a collection of jokes and anecdotes.

III. BACON'S PHILOSOPHY

The Baconian Method. Bacon is a child of the new hope which dawned with the Renaissance, of discovering the whole truth about the universe by the use of reason. This hope we have already seen working in Leonardo da Vinci, and we shall presently have occasion to note it in Descartes, fortified in his case by his perception of the possibilities of mathematics. Bacon, however, is content to develop a method of discovery and to leave to others its utilization. His mind was less speculative than Leonardo's and more empirical than Descartes'. For him the great instrument to understanding is *invention*, or the abandonment of random discovery for deliberate research. So, too, the first purpose of *invention* is practical—the domination of nature by man. Knowledge, he tells us, is power. The condition of invention is acquaintance with and right interpretation of nature. Paradoxically, we conquer her by obeying her.

The "Idols" and Their Demolition. But obedience is not so easy. It is hard to approach nature with an open mind and without preconception or prejudice. As a matter of fact, we habitually approach her, blinded by four outstanding kinds of preconception, or, as Bacon calls them, *Idols*. In the first place there are the "*Idols of the Tribe*," which are settled habits of perceiving and thinking rooted in all human beings, such, for example, as our tendency to introduce purposes or final causes into natural operations and to explain things by their results rather than their antecedents. Secondly, there are the "*Idols of the Cave*," or the prejudices of the individual, born of his particular character, education, and environment. Thirdly, there are the "*Idols of the Market Place*," or the deceptions due to the looseness and misuse of language and to the employment of words, without stopping to consider and define their meaning. Finally, there are the "*Idols of the Theater*," whose worship is the blind acceptance of tradition and authority. One of the ugliest and most baneful of these idols is Aristotle, against whose dominance of logic and scientific thinking Bacon, like his earlier namesake Roger Bacon, vehemently protests. Aristotle, he tells us, has sterilized logic by his preoccupation with the syllogism, and has vitiated his science by the employment of a faulty and hasty method of inferring general laws from particular instances. The syllogistic form of reasoning is unfruitful even in theoretic sci-

ence; the Aristotelian manner of observing and inferring from experience is of no help in inventing practical means of controlling nature and subjecting her to our ends.

Before we can begin to think correctly, we must demolish the Idols. We must oppose authority with observation of nature and with independence of spirit in drawing conclusions from that observation. We must cut loose from meaningless terms and expressions. We must discount, as far as we can, our personal preferences and prejudices. We must correct as far as possible the errors of the senses and of faulty reasoning.

If we will do all this, look nature in the face as she is, observe her, and experiment with her, we may hope to discover what Bacon calls the *forms* of things. By *form* we are not to understand the scholastic or Aristotelian forms, but rather the latent structures and processes in nature, which are reached, not through generalization, but through analysis of phenomena into their simpler constituents.

The Inductive Method. How, then, shall we go about our task? The answer is the Baconian method of *induction*. First, in any collection of phenomena under investigation, we must carefully compare the instances in which it does or does not appear. In this way, we extract essential aspects and conditions from those which are non-essential. If, for example, we are investigating a case of food-poisoning at a picnic, we try, by comparing what the different people have eaten, to exclude certain dishes as innocent, that is, as *negative instances*, and to fix upon others as possibly guilty. The next thing to do, as Bacon remarks, is to compare those instances in which the phenomenon is present in greater or lesser degree, or, in the case of our picnic, to see if we can correlate the degree of the poisoning in different individuals with the comparative amount they have eaten of this or that suspected food.

Upon the importance of *negative instances* Bacon dwells at some length. No conclusion can be established till the possibility of negative instances is excluded. For instance, we may feel reasonably sure that the poisoning has been caused by a certain dish, but we must be sure that *all* the people who ate it were made ill, before we can announce confidently that we have discovered the cause of their illness. If someone present has partaken of it, and *not* been poisoned, then we are still doubtful whether we have really run the offending article to earth. In Bacon's words, our experience, which was first *empirical* because of doubt, must remain *critical* because of continued doubt. It is just the absence of the critical spirit and the tendency to jump

to unwarranted conclusions, Bacon says, that are the cause of much credulity and superstition.

Finally, having proceeded by a cautious and critical *induction* from instances to forms, we must *verify* our results by continued observation and *experiment*. Here, however, a difficulty arises. In dealing with nature as a whole, we can never be sure that a negative instance will not turn up and invalidate our conclusions. Furthermore, an enormous number of instances would seem to be necessary to warrant our drawing any conclusions at all.

The Use of Prerogative Instances. These difficulties are partly obviated in Bacon's opinion by choosing for observation and experiment *prerogative instances* in which the phenomena under investigation may be considered typical, as we should say, or striking, and singularly free from adulteration with accidental or irrelevant aspects. He enumerates twenty-seven varieties of such instances. One, the *solitary instances*, as he calls them, which have next to nothing in common except the phenomena under investigation, will do for an example. Color is best studied in things like dew-drops, crystals, prisms, etc., where it is not complicated by the presence of other common characteristics in the objects compared. Again, Bacon remarks, the use of *analogies* is very fruitful. We may remember that the waves radiating from a stone thrown into a pool suggested to Leonardo an *analogous* theory of the nature both of sound and of light.

Once more, however, the use of these instruments must be attended by extreme caution. There must be no jumping, no flying away. We must proceed laboriously, step by step, from particulars to our inferences regarding them. The solid truths, which are of most concern to us, lie half-way between rules of thumb, or minor axioms, and the most general, highly abstract axioms or hypotheses. To keep our feet on these intermediate axioms, our understanding needs to be weighted down by attention to fact, rather than buoyed up by vain speculations.

Bacon's Metaphysical Preferences. Bacon's mind, as we may judge from the list of his works, is by no means confined in its interests to natural science. He was interested in the spectacle of human life, in history, in mythology, in the philosophy of politics, in poetry. Nor could he escape altogether some speculative adventure. Metaphysically, he seems to have inclined towards materialism, and he preferred openly the theories of the Ionian philosophers and of Democritus and Lucretius to the systems of Plato and Aristotle. Indeed, his criticism of the Atomists was to the effect that their atoms were not sufficiently tangible and physical. At the same time, the caution of his tempera-

ment led him to be careful in avoiding the reproach of irreligion and atheism. He professes faith in God and in what we might call the principles of natural religion. He makes no attack upon Christianity, but he disapproves strongly and openly of the fanaticism and persecution that have marked its history.

IV. BACON'S THEORY OF POETRY

Bacon's theory of the nature and function of poetry is also well worth noting. It is the business of science to conquer nature by obeying her; it is the function of poetry to conquer her by releasing the mind from bondage to her and permitting it to escape into a world of its own in which nature is remolded to suit the heart's desire. "Therefore poetry was ever thought to have some participation of divineness, because it doth raise and erect the mind, by submitting the shows of things to the desires of the mind, whereas reason doth buckle and bow the mind unto the nature of things."¹

Since conquest through obedience depends upon observation not only of the present, but of the past conserved in the memory both of the individual and the race, history contributes to the experience from which science springs and by which it is checked and verified. But it also provides rich material with which the *imagination* may work, and out of which it may build its magic reconstruction of the world.

Narrative, or epic, and dramatic poetry both present their imaginings in historic form, as taking place in time past or present. But there is another form—the parabolic—which pictures the significance or underlying form and structure of events in allegory and symbol, and is therefore more akin to science; as, for example, when it conveys scientific truths or teaches practical lessons by means of parables. But parables and allegories may also be woven about the unknown, the mysterious, the divine; in which case they produce a mythology, or, in other words, a symbolism which gives imaginative equivalents for the objects with which religion deals. The god Pan, for example, is a symbol of the universe taken as a whole; Eros, the oldest of the gods, the symbol of the atom; Prometheus, the allegory of human inventiveness; Narcissus, the image of self-love. Bacon applies this allegorical method to classical mythology with an excess of fancy bordering on the fantastic.

¹ *Advancement of Learning*, II, 13.

V. THOMAS HOBBS' LIFE AND CHARACTER

It is said that Bacon in the last years of his life at Gorhambury was sometimes attended in his walks by a young man who took down his thoughts from dictation. This young man was Thomas Hobbes, by whom Bacon's naturalistic and materialistic leanings in science were given metaphysical and systematic form. Born at Malmesbury in 1588, the son of a boorish and ignorant country parson, who was eventually forced to flee his parish after a brawl at the church door, Hobbes was precipitated into this world some two months before his time by the fright his mother shared with many other people in England at the approach of the Spanish Armada. At fifteen he entered Oxford, then according to contemporary accounts a place "where the young were debauched to drunkenness, wantonness, gaming, and other vices," and where he proved an idle student. But a trip to the Continent, after graduation, as tutor to one of the Cavendish boys, aroused his enthusiasm for scholarship, and especially for the study of the classics. A second and a third trip to the Continent at a much later date acquainted him with mathematics and brought him into personal contact with Galileo at Florence and with the mathematician Mersenne in Paris. Returning to England in 1637, he decided at the age of fifty to develop a philosophic system.

Residence in France. His meditations, however, had almost immediately to be transferred back to Paris. The Civil Wars in England were brewing, and Hobbes, fearing lest his political views should get him into trouble, fled to France once more. There he remained for the next eleven years, working on his system and, incidentally, disputing with Descartes. It may be remarked in passing that he was the worst of mathematicians, and was engaged all his life in controversies with men much more able than himself, by whom he was continually worsted. His somewhat cantankerous temper also embroiled him with the English universities, upon whose antiquated system of education he was unsparing in his attacks.

Writings. The fall of the Stuarts in 1645 apparently incited him to write his most famous work, *Leviathan*, published in 1650-1651. The political views he expressed in it angered the royal exiles in Paris, because of their apparent justification of Cromwell's usurpation, and offended both the French and the fugitive English clergy. Once more, fearing for his safety, Hobbes fled home to London, where he was

not molested. He now published, among other works, the *De Corpore* and the *De Homine*, in which he set forth his metaphysical views.

Old Age and Death. In 1660, the Stuarts were restored, and Hobbes not only regained the royal favor, but became a personal friend of Charles II, who was himself an intelligent, cultured, and mellow man, much interested in the natural sciences and particularly in chemistry. But he still had to bear the brunt of accusations of blasphemy and atheism hurled at him by the clergy. He was now an old man, but he still had many years to live. His activity, too, both mental and physical, was indefatigable. He walked every day—and sang every night—for exercise, and at the age of seventy-five still played an occasional game of tennis. At eighty-four he wrote his autobiography in Latin verse, and in the next two years translated the whole of the *Iliad* and the *Odyssey*. At ninety he was still writing. The last part of his life was spent at Chatsworth, the seat of the Devonshires, where in December, 1679, he died in his boots of a paralytic stroke, aged ninety-one.

He was over six feet tall, red-haired, irascible, generous, witty, a good conversationalist. He had been drunk, he said, about a hundred times in the course of his life, and he had an illegitimate daughter, for whom he provided amply.

VI. HOBBS' METAPHYSICS AND PHYSICS

Philosophy and Knowledge. Philosophy, Hobbes tells us in the opening paragraphs of the *De Corpore*, consists in the knowledge we gain of effects by arguing from causes, and of causes by arguing from effects. Its end is practical and lies in the usefulness of such knowledge in the conduct of everyday life. Its method consists in using the shortest way of procuring such knowledge. This we may do either by a *synthetic* construction of universal types, laws, and the like, out of particulars, or by an *analysis* of the particular into the more universal elements entering into it. Both methods are useful, but philosophical knowledge, or knowledge of the *causes* of things, can be gained only by analysis.

Before we can proceed further, we must ask what knowledge is. Reasoning, Hobbes replies, is a process of adding our percepts to one another or subtracting them from one another, and getting the results. This we could not do without speech and words, which we can employ as signs or symbols of large numbers of percepts, and use as means of communicating our percepts to others. These words, however, stand for nothing "universal" either in nature or in thought. All there is in

naturè, for example, corresponding to the word "man" is particular men; all there is in our mind is a particular image or picture of a man which we make the sign of all other individual percepts of the same sort.

True and False Propositions. If now we join two names together in such wise that the second is the name of the same thing as the first, we get a proposition. Propositions are *true* when the predicate is the name of everything of which the subject is predicate. By this token the proposition "the chimera has three heads" is as true as the proposition "man has two legs." How then are we to distinguish true propositions from false, and those which refer to facts from those which deal with fancies? Error, Hobbes replies, arises when an anticipated fact fails to fit the name we expected to apply to it. It is deception with respect to what might have been the case but turns out not to be so. Herein it differs from nonsense or absurdity, which asserts the impossible by combining names that designate contradictory particulars, as when we talk of an immaterial substance or a free will.

The distinction between propositions about facts and propositions about fancies can be drawn, Hobbes thinks, by demanding that all names shall be reduced to their least common denominators before being coupled. For example, if we dissect the chimera and its three heads, we shall find it made up in our mind of the same percepts as constitute for us what we call facts, and shall be able to reduce it by further analysis to the least common denominators into which all percepts may be resolved. Hence it will be expressible in the names and propositions that hold good for all experience, and that, in Hobbes' opinion, have objective validity and reference.

The Constituents of Reality. So fortified, we approach the philosophic problem. What are the least common denominators of all our percepts? They are space, body, and motion.² All things are extended and resistant, and alter their spatial relations to one another. Motion is the name by which we signify and understand their successive and simultaneous relations to one another.

"Spirit," in the sense that the theologians and theologically minded philosophers use it, is ruled out of the discussion. The word, Hobbes tells us, can only be used properly as the sign of two things, first, of a very attenuated body like air or gas, and second, of some adjectival quality, as when we speak of a peaceful or a warlike spirit in a nation, or of a person as being high-spirited. Used as the sign of a so-called

² Cf. *De Corpore*, Part II.

"immaterial substance," it stands for nothing at all, and denotes a contradiction in terms like "bodiless body."

The Root of Religion. At the same time, Hobbes refrains from attacking theological entities. They may exist; indeed, God must exist as the cause of the universe. But what he is like is undiscoverable by any process of analysis or reasoning, and his nature, therefore, cannot be made a subject of philosophical research or argument.

The root of religion Hobbes finds in man's natural curiosity about nature and his demand for an explanation of natural phenomena. Man is also afraid of these phenomena, since he does not understand them, and is in particular awe of seemingly chance occurrences. Also, he is much impressed by dreams and apparitions, which give rise to a belief in ghosts. Thus he comes to personify natural forces, to regard the immediate causes of all things as beings like himself, to propitiate them with prayers and ceremonies, and to consult them with omens and divinations. The weaknesses of a developed religion lie in the self-contradictions it exhibits in its doctrines, in the hypocrisy and selfishness that arise in a priestly caste, and in its reliance for its authority upon alleged miracles, which, when they are found to have natural causes, recoil upon those who have invoked them to bolster up religious dogma.³

The Universe Nothing but Matter in Motion. Space and time are attenuated images or "phantasms" of body in motion. If I imagined the corporeal aspects of the world annihilated, they would leave these images behind them. At the same time space and time have a filling, a stuffing, which we call *substance*. Moreover, the changes in bodies are continuous. Motion is imparted by the impact of a contiguous body. It makes no jumps. Cause and effect are the names we use to signify the passing on of motion from one body to another. Since Hobbes rejected the notion of the void, he was obliged to think of the spaces between the smallest particles of solid matter as filled with an insensible ether, through which the motions of one body are conveyed to another and produce seeming action at a distance.

In a word, the subject matter of philosophy is bodies and their motions. Reflection upon it suggests to Hobbes a fourfold division of philosophy, or, as we might say, four fundamental philosophic sciences.⁴ First, we have *geometry*, which treats of the relations of motion to space, and deals simply with the movements of bodies. Next, we have *physics*, which is concerned with the effects produced by one body

³ Cf. *Leviathan*, I, 12.

⁴ *De Corpore*, I, 6.

upon another incidentally to their motion. Passing now to bodies endowed with consciousness, or the power to represent things in sensations and images, we get *ethics*, which deals with the mental motions, or the conscious processes of the body, and *politics*, which deals with the effects and interactions of minds upon one another set up by their collisions and communications.

VII. HOBBS' ETHICS (PSYCHOLOGY)

Sensation and Images. With the very simple essentials of Hobbes' physics we are sufficiently acquainted. We have now to study the capacity possessed by some bodies for perceiving, imagining, and reasoning.⁵ This capacity, as Hobbes conceives it, is in no way a break with the activities of physical nature. Our sense-organs are jarred by different sorts of movements, and the shock administered to them is conveyed to the brain. Sensation is the motion thus set up in the body. It is not, therefore, of an order different from motion in general. An inanimate body hit by another body simply *quivers*; a body capable also of representing the shock *feels*.

Just as purely physical movement dies away because of the interruption and interposition of other motions, so perceptual movement also tends slowly to fade, for the same reasons. This fading or "decaying sense," as Hobbes calls it, is memory and imagination. Not only, however, do single images persist, but whole trains of sensuous representations continue to vibrate, in the order in which they were presented, and a fresh stimulus may revive the almost quiescent motions of similar or associated images experienced in the past.

In this way, we get associations of images, play of fancy, and trains of thought, which in some cases are seemingly haphazard, in others are threaded on some desire or design and are therefore deliberate and inventive. Since man is naturally an inquisitive animal, much of his thinking is regulated by the desire to answer the question "why" and to represent to himself the causes of things. Herein lies the basis of science and philosophy.

Good and Evil and Free-Will. The mention of desire directs our attention from the perceiving and thinking movements of the body to its motor and volitional responses. Stimulation of the senses not only makes an impression upon the body; it gets an answering kick out of it. This kick, or "endeavor," as Hobbes calls it, may be of two

⁵ Cf. *Leviathan*, I.

sorts. If the stimulus is beneficial, it carries us towards the stimulus, is attended by *pleasure*, and is called *appetite*, or *desire*, or *love*. If the stimulus is harmful, we tend to kick it away, and our motion of *aversion* is *painful* and is called *hate*. To these simple roots may be traced all the luxuriant flowering of the passions and the emotions, as well as the distinction between *good* and *evil*.

Again, these activities may be either voluntary or involuntary. They are voluntary when they are accompanied by images of the end towards which the movement is directed and of the means for attaining it. Voluntary movement, however, is commonly complex. It is the component of an alternation of appetites and aversions, hopes and fears, images of the good or evil consequences of doing or refraining, and is therefore vacillating and *deliberative*. We feel *free*, as long as the see-saw continues. Eventually, a component of forces is reached, we make up our mind, and the response occurs as an act of *will*.

VIII. HOBBS' POLITICS

Self-Assertion a Natural Fact and Right. *Ethics* has revealed the basis of *politics*. All men are actuated by an appetite for self-preservation and self-expansion just as every body tends mechanically to pursue the line of its original direction. Men, then, naturally desire power. This appetite and this tendency to assert himself can no more be bred out of man than the first law of motion can be bred out of a moving body. It can only be taken away in the one case as in the other by force. Every man, then, is free to use, as far as he can, his own power and momentum towards the furthering of his own interests; or, to express this natural fact in terms of *politics*, he has a *right* to do so.⁶

However, just as the natural tendency of moving bodies to pursue the line of their original direction brings them into collision, so the assertion of the freedom and the right of each individual man to preserve himself brings him into conflict with the exercise of the same freedom and right by his fellows. Wills clash even as bodies in motion run headlong into one another. The result, therefore, of the unlimited exercise of natural *rights* is a *bellum omnium contra omnes*. In fact, the natural condition of mankind is one in which all men are at war with one another, and thereby find their natural rights curtailed and stultified in part.

All Men Practically Equal in Power. Power in human beings is not a matter of brute force alone. It is a matter of cunning and in-

⁶ For Hobbes' political theory cf. *Leviathan*, I, 13 ff.; II, 1-21.

telligence, with which the physically weaker are often more liberally endowed. To all practical intents and purposes all men are equal in power, and it is impossible for any one individual to assert his will by crushing the wills of the others. Compromise is the only way out, if complete social chaos and stultification of the natural right to life and liberty and happiness are to be avoided.

This compromise takes the form of a deliberate quest for peace, called by Hobbes the *first law of nature*. Peace is attained by the acquiescence of the individual in the *second law of nature*, expressed in his willingness to refrain from exercising his full freedom and natural right, and to "be contented with so much liberty against other men as he would allow himself." Such "mutual transferring of right," Hobbes continues, "is that which men call contract."

The Necessity and Duties of Government. But, we ask at once, how is this covenant to be enforced? How are naturally hostile individuals to be held to their contractual obligation to relinquish a portion of their natural right to assert themselves without regard for others, and how are they to be forced to content themselves with the same liberty in enforcing their will against their fellows as they allow their fellows against themselves? The answer is that somewhere in society there must be lodged an agent empowered to enforce the social covenant. In other words, there must be a government endowed with sovereign powers and armed with the means of asserting its authority. What, then, are the specific functions and the limitations of sovereignty, and under what form of government is it most effectively exercised? Its prime function is to ensure the well-being of the state by defending the members of the commonwealth against one another, and the commonwealth against other communities. More specifically, its business is to coerce, to define, and administer justice, to make laws, to appoint agents, to confer honors, to choose and regulate the religion of the community and to censor all doctrines publicly taught.

Subject and Sovereign. It is the duty of the subject to obey the sovereign in all respects, since to it, and to it alone, he owes his rescue from the natural state of war, his protection against the predatory impulses of his neighbors, and his opportunity to go his own way and carve out his own career in peace, as far as the compact with others allows. On the other hand, sovereignty is not without its limitations. It owes, to be sure, no specific duties towards the subject, since obligations or duties arise only where there is a covenant, and covenants are possible only between subjects, not between the subject and the sovereign. Nevertheless, there are some things the sovereign cannot

do, and some things it must do. It cannot deprive the individual of his right to self-defense and self-preservation. No man, Hobbes tells us, can be properly bound by any covenant or coerced by any authority to injure himself, to be a witness against himself, to undergo hazards, or stoop to dishonor, except under conditions of national emergency. For the sovereign to attempt any of these things would be an abuse of sovereign power. Moreover, the subject is free to act as he chooses when and where the sovereign has failed to lay down rules for the guidance of his behavior.

Finally, obedience to authority is a return for its fulfilling the function of ensuring the safety and happiness of the subject. For the sovereign is sovereign only in so far as it fulfills this function. The interest of the governing agent, *qua* ruler, must be identical with that of the subject. The moment this identity ceases to exist, a government is misusing its sovereignty.

It follows that there can be no such thing as binding international law or treaties. For there is no international super-sovereign to enforce contracts between nations. International peace, then, is really an accident. "The law of nations," says Hobbes, "and the law of nature is the same thing." The natural relations of nations must always be what normal inter-individual relations would be without the social compact—a state of war.

Sovereignty Best Exercised by Absolute Monarchy. Under what form of government is sovereignty most effectively exercised? Hobbes answers, Under an absolute monarchy. To be sure, democracy seems to be the original and primitive form of government; but in its pure, town-meeting character, it is workable only in small and simple communities. The moment a community grows, there has to be delegation of sovereignty to some sort of representative agent and the establishment of permanent governmental machinery. Recurrent assemblage of the citizens, or of representative parliaments, with executives empowered to carry on in the interval, take the place of the original government by continuous democratic pow-wow round the camp-fire. It becomes, then, merely a question of expediency to what or to whom sovereignty, which in any case has to be delegated, should be delegated. The best delegate is one man rather than many, or, in other words, an absolute monarch.

Absolute monarchy, Hobbes continues, has in no respect more disadvantages than other forms of government, and in many respects it has less. The caprices of a king are no worse than those of a popular assembly. Nor is his tendency to favor and enrich private individuals

and interests at the expense of the public any more marked than that of parliaments. The difficulties sometimes presented by the hereditary principle, when an infant succeeds to the throne and a regency becomes necessary, are no greater than those which regularly accompany the effort to introduce continuity into democratic government.

On the other hand, an absolute monarch can more easily identify himself with the common good. In him private and public interest more readily coincide than they do in democratically elected governing agents. He can ask advice wherever and whenever he wishes. He can consult experts and follow their counsels. He can arrive secretly, and unaffected by popular clamor, at wise and scientific decisions. Democracy can do none of these things. Last but not least, he is above party and political factions. He takes no sides, has no irons in the fire, has nothing to gain or lose. His view of the public welfare is unprejudiced, non-partisan, and long-range. The moment it fails to be such, the moment he opposes his own interest to the common good, he can himself be rightly opposed. Thus there is always a check upon unwarranted exercise of power.

The Stir Created by "Leviathan." The *Leviathan*, in which Hobbes sets forth his views on the nature of the individual and the state, is probably the greatest work on political philosophy produced in the seventeenth century, and one of the greatest written in modern times. It provoked an immediate storm, as we have seen, which estranged him from all parties alike, Royalist and Cromwellian, Anglican and Puritan. It was largely responsible for the accusations of heresy, blasphemy, and atheism, which we have already noted. Its influence was profound and wide-reaching and still affects our theories of sovereignty and government today.

Chapter V

DESCARTES AND THE OCCASIONALISTS

I. DESCARTES' LIFE

Education and Character. René Descartes (1596-1650) came of the lesser nobility of Touraine. His father followed the law, and was a member of the local parliament in Brittany. His mother died in giving him birth, and from her he inherited a delicate constitution. At the age of eight he entered the famous Jesuit school at La Flèche, founded by Henry IV for the sons of gentlemen, where he was put through the usual curriculum not only of studies, but of discipline, manners, and social polish. His poor health won for him certain exceptions and favors, among them permission to lie abed mornings, which became with him a life-long habit. He was a precocious child and an obedient and bright scholar, inclined towards mathematics, and especially towards geometry. With algebra, which had just been introduced, he was as yet unacquainted.

After eight years at school, and a dull year in the country, he was let loose in Paris by his father, with plenty of money and a valet to look after him. For a youth of seventeen he behaved himself extraordinarily well in the circumstances. Indeed, Descartes was all his life a man without vices. His great diversion was gambling, but, as he gambled prudently and for stakes within his means, this can hardly be called a vice. It was, however, comparatively easy for him to keep his head, for, young as he was, he had already developed the inner detachment, the love of solitude and retirement, and the dislike of society, that always characterized him. He plunged not into dissipations, but into study—a course in which he was aided by meeting an old school friend, Mersenne, now a priest and mathematician, who introduced him to Mydorge, the most celebrated French mathematician of the day.

Enlistment in the Army. But Descartes was also restless and eager to travel and see the world, and in those days there was no better way of seeing it than by enlisting in one of the numerous armies that were

forever campaigning about Europe. Descartes chose the service of Maurice of Nassau, son of William the Silent. At that time Holland, having won her independence from Spain, was one of the richest, the most liberal, and the most civilized of European countries. Moreover, Maurice himself was a remarkable man, who reflected in the variety of his interests and the breadth of his outlook on life something of the universality of the spirit of the Renaissance. Besides being a great strategist and well-versed in military engineering in all its branches, he was a student of science and mathematics, and had gathered about him in his camp at Breda a distinguished group of scientists. Here Descartes settled himself from 1617 to 1619, and to this period belong his first writings—a treatise on music, various mathematical studies, and his *Pensées*. At this time, too, he passed through a curious mental crisis. He made, he said, his “great discovery,” which consisted apparently in a sudden intuition of the possibility of applying algebra, with which he was now acquainted, to geometry. In other words, he discovered analytic geometry.

Life in Paris and Holland. In 1619 the Thirty Years’ War broke out, precipitated by the revolt of the Protestants in Bohemia, and Descartes joined up with the Catholic army. The Catholics were successful, and with them Descartes entered Prague. But he soon tired of soldiering and returned to Paris, where he spent the next three years. Here he was much sought after by the brilliant society that was so soon to come to full flower in the great age of French literature. Corneille was a stripling. Mademoiselle de Scudéry was just out of the baby-carriage. Molière, La Fontaine, Pascal, Madame de Sévigné, Bossuet, were about to enter it before Descartes left Paris again, this time for good and all, except for brief visits. Racine still lacked some ten or more years of being born. This pregnant and expectant brilliance Descartes tried to dodge, but in vain. He even went into hiding, but was unearthed.

Finally, in 1628, he took refuge from its importunities in Holland, where he lived first in one place, then another. He could now devote himself without interruption to his favorite studies, astronomy, physics, chemistry, anatomy and medicine. Now, too, he wrote his *Rules for the Direction of the Mind*, and a work on the *World*, which he withdrew, however, on hearing of the condemnation of Galileo. In 1637 the *Discourse on Method* appeared, and in 1641 the *Meditations*. To this epoch belongs his solitary love affair. He had a mistress, who bore him a daughter.

Descartes’ philosophy was now known, and he had an enthusiasitic

following, centered for the moment at the University of Utrecht. He was also in correspondence and in controversy with Hobbes, Gassendi, the Jansenist Arnould, More the Cambridge Platonist, and others. But these academic tempests in the philosophic tea-pot soon boiled over into scalding controversies of more serious proportions. The rectorship of the University of Utrecht fell into the hands of Voët, the most prominent of the Dutch Reformed theologians, who, alarmed at the popularity of the Cartesian system, and particularly shocked by its suggestion that the earth moved, launched an attack upon its author. Indeed, attempts were made to proscribe the teaching of it at the University, which might have succeeded, had Descartes not appealed directly through the French ambassador to William of Orange, at whose behest the States-General intervened and shut up his persecutors.

Friendship with Elizabeth of Bohemia. The most romantic of Descartes' admirers at the moment was the Princess Elizabeth of Bohemia, granddaughter on her mother's side of James I of England, and daughter of the King Frederick, whose flight from Prague to refuge at The Hague Descartes in his modest capacity of soldier had helped precipitate. A brilliant, melancholy, brooding woman, much interested in philosophy, she was the chief ornament of the fashionable little court held by her widowed mother at the Dutch capital. Descartes, whose birth and means, as well as his fame, made him a welcome guest, attended it frequently and struck up a life-long friendship with the Princess. They talked, they wrote to each other, Descartes directed her reading, sent her his own manuscript to peruse, and dedicated to her the *Principles*, published in 1644.

The Hague, however, offered other attractions. There, too, was the court of the King, William of Orange, and the aristocratic assemblage of the States-General. Holland was in the toils of her particular Renaissance. The artists Rubens and Van Dyck were but just dead, and Rembrandt was coming into his own. Freedom of thought and speech were greater there than anywhere else in Europe. All in all, The Hague vied with Paris as the intellectual and artistic center of the western world.

Christina of Sweden. But Descartes was not destined to end his days in halcyon calm. He had a friend named Chanut, who was French minister to Sweden. Among other things, Chanut wrote him of the extraordinary personality of Christina, the Swedish Queen. His accounts can scarcely have been exaggerated. Disappointed and angered at the fact that his heir turned out a girl rather than a boy, her father, the great Gustavus Adolphus, tried to get even with fate by correcting

through education nature's mistake in sex. His success was beyond all expectations. Brought up by the Regency in accordance with her father's wishes—Gustavus died while she was still a child—she developed into one of the most astonishing characters of the day. A woman-hater, she habitually wore masculine riding-clothes and "reformed" such feminine apparel as sometimes she had to don. She was excessively hardy, an excellent shot, and could spend ten hours at a time in the saddle without undue fatigue. Her mind was as strong and enduring as her body. She studied twelve hours a day, had a great talent for languages, knew French, Italian, Spanish, German, Greek and Latin, and read Tacitus, that most difficult of Latin prose authors, as a relaxation. Also she governed.

Journey to Stockholm and Death There. Descartes was much intrigued by Chanut's description of this extraordinary female and of the interesting intellectual circle she had gathered at her court. Christina's curiosity, also, was aroused by the ambassador's account of his friend, the great Descartes. They began to correspond, and the Queen added his works to those of Tacitus as light literature with which to beguile herself in moments snatched from business of state and hunting. Eventually she invited him to Stockholm. She wanted to get his philosophy first hand. Also she had it in mind to found a Swedish Academy, modeled after the French Academy. Descartes accepted.

He arrived in Stockholm in October 1649, in the dusk of the approaching Swedish winter. He had his audience with Christina, where he learned, with what secret horror we may well imagine, that the only hour she could spare for instruction in Cartesianism was five o'clock in the morning. Gone were the happy days of lying snug abed till noon, writing and meditating. She insisted that he put his literary "remains" in fit shape to be published—which he did. At her command he also drew up rules of procedure for her projected Academy. These proved to be his death warrant. The winter was especially severe. Chanut was down with pneumonia, and Descartes, whose lungs were the weak point in a generally delicate constitution, was unwell. He returned from the matutinal interview with the Queen at which he submitted his plans, sickening himself, as it proved, with pneumonia, and took to his bed. His medical studies had made him distrustful of doctors, and he would have none of their bleedings and other antiquated ministrations. He held out for ten days. On February 11, 1650, he died, tended by Chanut, who had by this time recovered from his illness, and fortified by the rites of the Church.

Buried first in Stockholm, his body was later removed to Paris,

where it was first placed in S. Geneviève du Mont. Still later it was transferred to the church of S. Germain des Près, where it now reposes.

In appearance, Descartes was slight, but well-built, with a large head and a pale complexion, a big nose, and a wart on his cheek. Being bald, he wore a wig. He was very particular about his dress, and always wore a scarf, a sword, and a feather in his hat. The inner man was good-tempered, serene, abstemious and regular in his habits, indifferent to uninteresting people, kind and generous to his servants, avoiding excitement and worry, devoted to his garden, a lover of riding and walking, never rich, but always well off. His generosity prevented his amassing money during his lifetime. His household was comfortable and well-ordered.

II. SOURCES AND DIRECTIVES OF THE CARTESIAN PHILOSOPHY

The Scholastics and the Renaissance. The Cartesian philosophy springs, generally speaking, from two sources. On the one hand, Descartes received at the hands of the Jesuits a thorough training in Scholastic logic and metaphysics; on the other, inspired by the spirit of the times, he grounded himself thoroughly in the new science of the day, and particularly in mathematics. Like Leonardo and Bacon he had a vision of the possibilities of a novel scientific method, and perceived the fundamental role that mathematics was to play in scientific investigation and in the formulation of scientific hypotheses. His metaphysics bears many evidences of Scholastic influence. Like Augustine he falls back upon the principle of inner certitude as his starting-point, and his deductions from that principle follow in many respects the line of the Augustinian and Scholastic argument. At the same time, he seeks to reinforce Scholasticism with the precision of mathematical science.

Rules for the Mind and for Daily Life. Already, in his early work, the *Rules for the Direction of the Mind*, he had laid down the method he intended to follow. This he condensed and restated in the *Discourse*. He will, he says, confine his thinking to fields in which certain and indisputable knowledge seems possible of attainment. He will not take other people's opinions, or accept as a starting-point anything short of an *intuition*, or mental content, so clear and so distinct that there is no avoiding it. Building upon this intuition, he will keep his superstructure anchored and riveted to its foundation by constant analysis and review and verification of his procedure. No difficulties will be skirted or left unresolved. The foundations will be frequently

re-examined and retested by subjecting even the seemingly self-evident to searching criticism. Last, but not least, he will do his best, as he says in a letter to Henry More, the Cambridge Platonist, to avoid what we today call "wishful thinking." "Nothing," he writes, "removes us further from the pathway of truth than to establish certain things as true of which no reason, but our will alone, persuades us."¹

In the *Discourse on Method*, Descartes adds some rules of provisional practical conduct to be observed in his pursuit of truth. He will, he declares, continue to lead a normal, well-balanced daily life, avoiding extremes and eccentricities. He will adhere to Catholicism, and he will respect public opinion and convention. He will avoid the vice of vacillation. His course will be firm and resolute, founded on probability where certainty is impossible. Nor shall it be plagued by the "repentings and remorsees that disturb the consciences of feeble and uncertain minds." His third maxim "was to endeavor always to conquer myself rather than fortune, and change my desires rather than the order of the world." To this end he would discipline his mind to acquiesce in the changes of external fortune, and would seek to render himself indifferent to them.

III. CERTAINTY THROUGH DOUBT

Descartes now proceeds to apply his method. He will begin by *doubting* everything that can be doubted. His experience of the external world of space and time, of his own body, of his own life from day to day, may all be dream and illusion. But in any case the dream is there beyond all possibility of doubt. He is dreaming, he is experiencing, he is thinking. Therefore he, at least, exists. *Cogito, ergo sum. Je pense, donc je suis.* I think, therefore I am.

Proof of Existence. If, now, *cogito, ergo sum* is undeniably true, there may be discovered in it a criterion for establishing further truth. This Descartes found in its *clearness*, or inescapable presence, and in its distinctness, or definite and unmistakable character, not to be confounded with anything else. Wherever, then, I can find anything else as *given*, and as *distinctly itself and nothing else* as my own existence, I can claim for it equal truth. But I am as clearly and distinctly *not* the author of all of my experience, as I am the author of some of it. I can therefore conclude that a being more perfect and more complete than myself exists. It may be argued, however, that after all

¹ Correspondence, Vol. I, p. 402. Cf. Haldane, *Life of René Descartes*, p. 328.

in our dreams we move in a seemingly objective world, which, nevertheless, does not really exist outside us, but is spun out of ourselves. To dispel this lingering doubt, Descartes invokes the ontological argument of St. Anselm that the idea of perfection or completeness logically involves existence, and that we, imperfect beings that we recognize ourselves to be, are not sufficient reason for the idea of perfection we entertain, or for that matter, for the nature and the difference of the other ideas that occur to us. Nor can we doubt without implicitly asserting the existence of an objective standard of reality and truth.

Again, turning to arguments of a cosmological sort, we are not sufficient reason for either the fact of the continuance or existence of ourselves. We are not self-created or self-existent. We must then have a cause.

Furthermore, we are in a position to deduce the nature of that cause. Nothing less than an intelligent, rational, moral cause can be sufficient reason for our own thinking and moral nature. Therefore, the perfect, complete being, whose existence is as indubitable as our own, must be a supremely intelligent, rational, and moral being. In short, God exists.

The deduction of an external, sensuous, physical world is now easy. My senses testify to its existence, since I cannot control them at will, and refer them to an external object or cause. Their immediate cause cannot be God, since God is revealed as an incorporeal mind or spirit. It cannot be myself, since in that case God would be deceiving me by making me feel that my sensations come from without; and deception is something of which God, being perfect, is by definition incapable. Therefore, an external physical world exists. To be sure, my senses deceive me as to its nature; but God, in giving me my reason, has endowed me with the means of seeing through that deception and figuring out the true nature of the physical order.

IV. ERROR AND EVIL

The Nature and Cause of Error. But my reason itself frequently is at fault. How can error occur in an instrument naturally attuned to truth and given me by God for the express purpose of correcting error? To answer this question, let me first look within myself. There I find that many of my ideas present themselves to me as unclear and indistinct. Still, if they present themselves as such, I can be in no error regarding them. I recognize their doubtfulness and my own

ignorance and uncertainty. It is only when I take an unclear and indistinct idea to be clear and distinct, that I fall into error. But how can I feel an idea to be true, which presents itself to me as doubtful?

Descartes answers that I am a creature of impulse and volition as well as understanding, and my will is not subject to the distinction between true and false, certain and doubtful, made by the understanding. In this mere jumping or assenting of the will to this, that, or the other idea, there is, to be sure, no more error than there is in the entertainment by the understanding of ideas it recognizes as unclear and indistinct. But sometimes the will impels us to give a mental assent to certain ideas to which the understanding, isolated from the will, does not assent, and leads us to regard ideas as true which in our more rational moments we should feel were indistinct and unclear and insufficiently thought out. When we do this, and allow our will rather than our intellect to determine what seems true and what seems false, we fall into error. It is the business, then, of the seeker after truth to confine the assents of his will within the circle of ideas that present themselves to his intellect as clear and distinct. Moreover, since man is a free agent, he may justly be blamed for letting his wishes run away with him, and may be held responsible for the loose and erroneous thinking that results.

The chief causes of our assent to unclear and indistinct ideas as clear and distinct, lie in unanalyzed and uncorrected childhood impressions of the nature and importance of our sensations and the character of the external world, too deeply ingrained to be shaken off even by mature reflection. Again, our attention tires so easily, particularly when occupied with entities not immediately presented to sense or imagination, that it is wont to abandon the search for such truth as is not immediately perceived, and to take the easiest way out. Finally, we are the victims of ambiguous words or phrases, which we do not stop to analyze, and which express our ideas inaccurately.

Evil. The problem of error raises the problem of evil. How can error find a place in a perfect world, created by an omnipotent and morally perfect God? Descartes' answers are conventional. We must trust God. Moreover, it is the nature of a finite being to be imperfect, and therefore to err. The imperfection of the part may contribute to the perfection of the whole. Free-will—which is in itself a perfection—involves the possibility of misuse.

V. FREE-WILL

In his theory of free-will Descartes tries to work both the theories of self-determination and of "indifference" into his scheme. God's will is "indifferent," as the Scotists taught. It is a spontaneous act arbitrarily determining what is good and what is evil. But man is naturally inclined to follow the good, and his reason is naturally directed towards the truth. Following the dictates of the nature given me by God is perfect freedom. "But the indifference of which I am conscious when I am not impelled to one side rather than another for want of a reason is the lowest grade of liberty, and manifests defect or negation of knowledge rather than perfection of will; for, if I always clearly knew what was true and good, I should never have any difficulty in determining what judgment I ought to come to, and what choice I ought to make, and I should thus be entirely free without ever being indifferent."²

His clerical opponents at once accused Descartes of attributing the "lowest grade of liberty" to God. To this he replied that the standard of goodness and truth to which we naturally seek to conform ourselves is set for us by God, but that this standard was freely willed by him undetermined by *any* motive, and therefore without hesitation or choice between motives such as is implied in the lower form of liberty. The problem of reconciling human free-will with divine foreordination, he dismissed as involving a mystery too deep for our finite minds to fathom, and therefore as insoluble.

VI. SUMMARY OF THE CARTESIAN SYSTEM

Mind and Body. Descartes is now ready to undertake, in the first part of his *Principles*, a formal statement of his philosophy. Our minds are in contact with objects and their qualities, and with eternal truths. Objects divide themselves into two classes, thinking things and extended or physical objects. The qualities or affections we attribute to objects are the result of the interaction between mind and body. The essence, or substance, of the mind is simply to think; the essence, or substance, of the body is simply to be extended. Neither body nor mind, however, should be called substance in the strict sense of the term, since neither is self-existent and self-explanatory. God alone can lay claim to that title.

² *Med.*, IV, trans. Veitch.

Universals. Universals, Descartes insists, have no real existence of their own. For example, things like duration, order, and number either are modes of physical existence, or, when abstracted by the mind and emptied of their content, are modes of thinking. But, even as modes of thinking, general ideas are founded on resemblances, and are simply signs standing for groups of similar particulars, not for a common nature pervading them.

The mind does, however, think in certain categories. It distinguishes relative substances like mind and body from the absolute substance, God. It distinguishes substance from its modifications, or even essential attributes from substance; the stone, for instance, from its shape or even from its duration or persistence. It thus forms general notions like genus, species, differentia, property, accident.

Inadmissibility of Final and Formal Causes. Purposes or final causes are ruled out by Descartes as explanations of the existence and the behavior of the universe. Generally speaking, we can form no notion of the end to which God made the world, since the divine purpose is unfathomable. Therefore, we have no business to account for the existence of the world by imputing to God some special reason for creating it. Such guessing becomes doubly ridiculous when we fancy ourselves and our happiness to be the end God had in view, and proceed to explain and evaluate the processes of nature as means for producing man. It becomes positively puerile if we suppose, as some people do, that the reason for man's existence lies in God's desire to be flattered and praised by human worship.

Bad enough in metaphysics, Descartes feels, teleology in physics is worse than useless. Final causes—explaining things by their results instead of their antecedents—have no place in the physical sciences. Even in biology and physiology they are inadmissible. We do not explain the presence or the structure of an organ by saying that it exists *in order* to perform a certain function. Organs do, indeed, perform their functions admirably, but we are not, therefore, entitled to assert that they have been created by God expressly for that purpose.

The old substantial forms of the Scholastics are equally unsatisfactory as explanations. They are bad metaphysics in the first place, and in any case science would never get very far by invoking them as explanations. To say that a thing acts as it does because it is its nature to do so does not very greatly further the search for the causes of events.

VII. PHYSICS

The Nature of the Physical World. Having thus in the *Discourse* and portions of the *Meditations* and the *Principles* established his metaphysics, Descartes turns to his physics and tackles the problems of the nature of the physical world and of the relations of mind and body in man.

Give me extension and motion, he cries, and I will construct a world.³ The nature of matter is his first concern. He strips from it, at once, all its qualities such as weight, impenetrability, color, and the like, and reduces its essence to extension alone. Furthermore, denying the possibility of the void, or empty space, he rejects the atomic theory which Gassendi was reviving and defending. All space is filled,⁴ or, in other words, space and matter are identical. Remove all bodies from space, and space would collapse and shrink and vanish, for without body there would be nothing to separate and hold apart its different points and places.

Again, location, or place, is a relative term, defined with respect to an arbitrarily chosen fixed point. The boundaries, or surfaces, of any one chunk of space are set by the chunks that immediately surround it. These form the place or space *outside* the chunk in question. Consequently, so-called change of place is a misnomer. Objects do not pass from one place to another in the sense of occupying first one portion of space and then another. Being identical with the space they fill and the place they occupy, they carry their space and their place and their boundaries with them, wherever they go. They are said to have changed their place, when their place has changed its external boundaries by bringing its surfaces into contact with the *superficies* of new chunks of space.⁵ When, however, we abstract the extended from the other aspects of matter, and construct a geometrical, spread-out manifold of fixed points in fixed relation to one another, we represent to ourselves this shift of surfaces that occurs when the parts of space slide away from the parts with which they have been in contact, and come into contact with the boundaries of other places, as the passage of a body *through space* from one fixed location to another.

But can motion be conceived as taking place in a solid space? Descartes answers this question by invoking the infinite divisibility of matter. Space does not come in solid blocks. It has large chunks and

³ *Disc.*, V. *Traité du Monde*, 6.

small, and the bigger pieces are bathed, so to speak, in a sea of tiny corpuscles. Through these they can move, much as fishes of all sizes or shapes swim through the surrounding water without losing complete contact with it for an instant.

Matter, or extension, is, in Descartes' opinion, essentially inert and motionless. We must suppose, then, that God in creating it introduced motion into every part of it. This motion, once introduced, can never be destroyed, short of an act of God. It can only be transferred. Furthermore, we must also assume certain laws—the law of inertia, according to which each thing tends to preserve any given state of motion or rest unless disturbed by an outer force; the law of least action, according to which motion tends always to transmit itself in a straight line; and the law of action and reaction, according to which, when two bodies meet, the lesser loses its direction but not its motion, the larger none of its direction and only as much of its motion as it imparts to the other body.

Cosmology. Supposing that under these conditions God has introduced motion everywhere into extension, what will happen? Everything will tend to start off in a straight line from a given point, or to expand about a given point. But by collision these rectilinear movements will be transformed into circular, revolving motions, and innumerable vortices will be formed. Friction will tend to break up extension into corpuscles of various sizes and to rub them down into spheres. In this way matter of different degrees of density will come into existence. The smaller and less resistant particles will be driven towards the center of the vortex, where they will globulate and constitute suns and fixed stars; and the coarser and less polished chunks will compose the planets. The planetary masses will move in the vortex about the central suns, and, revolving at the same time upon their axes, will create a vortex of their own, and throw off satellites.

The condemnation of Galileo, however, made Descartes hedge. The earth itself does not move around the sun. It is carried in a vortex that so moves. In the same way, a boat, floating on the surface of a stream, does not move relatively to the current that carries it past objects on the shore.

The mechanical explanation adopted in physics and astronomy is carried by Descartes into every department of natural life, including biology and physiology. He was thus led to his theory that animals are automata without consciousness, whose apparently conscious and even intelligent behavior is to be explained mechanically as the reaction of an excessively complicated machine. This theory, however, was not

original with Descartes. It was held before him on theological grounds, by the Jesuit Pereira, who felt that to attribute consciousness to animals complicated both the question of human immortality and the problem of evil. Descartes' view provoked immediate protest and he was severely taken to task for its inhumanity by Henry More. ✓

The Interaction of the Human Mind and Body. Descartes, however, could not regard human beings as automata. In them thinking substance was obviously conjoined with extended substance. But how? The human body, being part of the mechanical order, was itself a mechanical apparatus whose every reaction could be explained without invoking consciousness. Moreover, if one tried to introduce conscious interference into it, how could the mind control the body without exerting physical force and thus augmenting the fixed quantity of motion created by divine fiat? Finally, how could an immaterial, unextended substance like the mind, having nothing in common with matter, be conceived in any sort of contact with it?

Faced with this difficulty, Descartes made an ingenious attempt to cope with it. The mind, he asserted, merely *directs* the course of the currents of motion flowing through the body, without in any way altering their volume. He located the soul's point of contact with the body in the centrally situated pineal gland, buried deep between the two hemispheres of the brain. This, his anatomical and physiological studies of the sensory apparatus and the nervous system suggested, was a kind of bottle-neck through which the incoming sensory currents of "animal spirits" passed, and in which they were transformed into outgoing impulses terminating in muscular movement. Here, then, was the natural spot for the mind to intervene and switch the trains of movement set up by sensory stimulation to the appropriate volitional and motor, or outgoing tracks.

The weakness of his attempt was obvious. The mind could no more alter the *direction* of the flow of motion in the body without exerting physical energy than it could alter the quantity, supposing even that the quantity were alterable. The problem, then, of the interaction of mind and body was raised rather than solved by Descartes, and remained a major philosophic perplexity. It was one of the chief inspirations of the systems of both Spinoza and Leibnitz, as we shall presently see. But, before turning to them, we shall do well first to examine the attempts to deal with it made by the so-called *Occasionalists*.

VIII. THE OCCASIONALISTS

General Theory. The Occasionalists, rejecting Descartes' attempt to explain interaction, held that any direct and natural communication between mind and body was impossible and invoked supernatural aid to effect it. God, they said, acted as an intermediary. On the *occasion* of the body being stimulated, God aroused in the mind the appropriate sensation and response. And on the *occasion* of that response, God set the body moving in an appropriate reaction. This seemingly cumbersome business was short-circuited by the divine omniscience. In a single instantaneous act of combined omniscience and omnipotence, God was aware of the situation in the nervous system, had aroused the corresponding sensations in the soul, and had produced in the body the motor reactions to which the mind was inclined by such stimulation.

Geulincx. Geulincx (1625-1669) of Antwerp, for a time professor of philosophy and medicine at the University of Louvain, and a French priest, Malebranche, were the most eminent exponents of this view, taking it, however, in different perspectives. Geulincx argued that since the essence of the mind is to think, all our unconscious and involuntary activity takes place, not in the mind, but in the body, and therefore is to be identified with physical motion. The activity, however, of a purely thinking substance cannot be reduced to physical movement, and therefore cannot interact with it. Nevertheless, such interaction seems to take place. Feeling and volition seem to cause movements of the body. The only way out of this dilemma is to suppose that conscious states are simply the *occasions* of these movements, and that God is their real *cause*.⁴

Malebranche. Malebranche both expanded Geulincx' assertions, and supplemented them by maintaining that God is the cause of our conscious experience as well as of the bodily processes. Matter, being passive, can neither initiate nor transmit physical motion of itself. All movement, whether or not corresponding to mental states, needs the constant intervention of God to set it and to keep it going. But in that case, how account for sinful movements and for the apparent subjection of the mind to bodily appetites and impulses? By the Fall, Malebranche answers, which obscures our vision of the true relations between things. Salvation consists in regaining that vision, which we have lost.

⁴ Cf. particularly Geulincx's *Metaphysica vera et ad mentem peripateticam*.

The question now arises how we come by vision, or consciousness, or knowledge of any sort. There are three possible sources of knowledge—material objects, the soul, and God. Material objects cannot implant knowledge, since their images or messages, even before they reached our senses, would become confused and mixed in traversing space, and, when they finally did stimulate our bodies, would set up physical movements, not conscious states. Furthermore, the transformation of bodily into mental activity is inconceivable. The mind, however, can no more account for mental processes than can the body. Being finite, it cannot create them out of nothing. It cannot, as we have just seen, create them out of bodily states. For that matter, consciousness cannot even refer to physical objects or represent them in mental terms, since it is impossible to represent or refer to what has never been present or given us so much as an inkling of its existence. Hence, seeming experience of an external world cannot be even a mode of consciousness, much less its creation.

We are left, then, with God as the only possible source of our experience. Even so, we cannot suppose that he simply implanted potential knowledge in the mind, and then left the mind to develop this knowledge little by little, running, so to speak, under its own steam. A finite mind is not capable of containing, even potentially, the infinity of ideas deployed by consciousness. Hence God must be continually imparting to the mind every minutest item of experience separately and one by one.

Pursuing this train of thought still further, Malebranche is led to conceive an intelligible extension, in which ideas co-exist, parallel to the physical extension of objects, and to regard the mind of God as the spiritual "place" in which all finite minds have their dwelling. All "vision" is "vision in God"; all experience and knowledge, even of the so-called external world, are experience and knowledge of God's ideas, which are modes and limitations of his being. All desires, being directed towards an imagined good, are forms of the love of God.

IX. THE SCHOOL OF PORT ROYAL

Pascal. Before passing on to Spinoza we ought to mention the School of Port Royal, originally a Cistercian abbey near Paris, which under the famous Marie Angélique Arnauld, became the great stronghold of the Jansenists and the rallying point for a number of famous men, among them Blaise Pascal (1623-1662), the author of the *Pensées* and the *Lettres Provinciales*. Pascal was greatly influenced by Mon-

taigne, and by Montaigne's skeptical attitude, or, as he called it, Pyrrhonism. But with Pascal skepticism and a thoroughgoing Jansenism went hand-in-hand, since the impossibility of supporting the content of the Christian revelation by reason and the doubts raised by reason as to the credibility of that revelation testified to the completeness of man's fall, and rendered faith the only possible means of salvation and of attaining a knowledge of God. Belief, then, in the truth of Christianity is wholly a matter of faith, and, conversely, faith has no ground except the fact of revelation.

But Pascal has other claims to fame than those afforded by the *Pensées* and the *Lettres*. He was also one of the most eminent mathematicians and scientists of his time. At the age of sixteen he wrote a classic work on conic sections. He made extensive studies of the cycloid curve, then much in dispute among mathematicians, laid the foundations for the calculus, and was the creator of the theory of probability. In science he made valuable experiments in hydrodynamics, established the fact that air possesses weight, and invented the barometer.

Chapter VI

SPINOZA

I. LIFE

Education and Excommunication. The outward life of Spinoza presents a striking contrast to that of Descartes. Born in Amsterdam in 1632, of one of the Jewish families that had sought refuge in the Netherlands from Spanish persecution, he, too, received a broad and thorough education. From the Synagogue he learned his Talmud and his Maimonides and the other medieval Jewish theologians. He also became acquainted with the mystic lore of the Kabbala, which, in spite of his profound contempt for it, seems to have influenced him, and is perhaps responsible for the traces of Neo-Platonism some writers find in his system.¹ Latin he acquired thoroughly from Francis Van den Ende, a learned and free-thinking physician, well versed also in the natural sciences, who incidentally was later hanged by the French for taking part in a conspiracy against the monarchy. With Greek he was less well acquainted. Spanish, and perhaps Portuguese, as well as Hebrew, were native tongues, and he knew also French and Italian, and, it may be, some German. Van den Ende also introduced him to the writings of Giordano Bruno and Descartes, and probably grounded him in science. Also, following the Rabbinical imposition of a handicraft upon every Jew, whatever his other education, Spinoza learned the trade of making lenses.

By the time he was twenty-three he was showing signs of rebellion against both the letter and the spirit of the orthodox Jewish faith. Apparently, this rebellion soon became open, for, a year later, after an unsuccessful attempt to bribe him into outward conformity and an equally unsuccessful attempt of some orthodox fanatic to assassinate him, he was formally accused of heresy and excommunicated from the Synagogue. Henceforth he no longer existed for his community, his friends, and his family, and had to begin a new life, alone.

Removal to The Hague and Death. Spinoza received the news of his extinction as a Jew calmly, with the remark that it was only what

¹ Cf. Caird, *Spinoza* (Blackwood, 1899), pp. 39 ff.

he expected. He changed his given name, Baruch, to the Latin equivalent, Benedictus, and went on his way. Fortunately, he had Gentile friends, belonging to the suspected but tolerated Remonstrant sect, with whom he was stopping at the time of the excommunication, and with whom he continued to make his home. For a living he had his lenses to fall back on. Four years later he moved to a suburb of The Hague, and eventually, in 1670, to the city itself. There he took lodgings and worked at his trade till his death, which occurred from consumption in 1677.

Philosophical Works. In 1663 Spinoza had published a summary of the second part of Descartes' *Principles*, and, the year of his arrival at The Hague, this was followed by the *Tractatus Theologico-Politicus*, a book so liberal in tone that he deemed it prudent, even in comparatively tolerant Holland, to issue it under a fictitious name and to see that it was not translated into Dutch. Even so, complaint was at once made by the Dutch Synod to the States-General, and the work was prohibited. The Catholics speedily followed suit and placed it on the Index. However, it won for Spinoza, whose authorship became known, celebrity in learned and emancipated circles and a call to the chair of philosophy at Heidelberg, where he was promised complete liberty of teaching, provided he would not disturb the established religion. Spinoza refused on the ground that teaching would cut too much into his time, and that the restrictions laid down would probably get him into difficulties.

Hereafter Spinoza published nothing. But he carried on a voluminous correspondence with learned friends and started the unfinished work *On the Amendment of the Understanding*. Last but not least, we may imagine him every evening, after he closed up shop, working away on the *Ethics*. The manuscript was finished by 1674, and was shown to several of his friends, including Leibnitz. He had, indeed, thought of issuing it in 1675, but the mere rumor that he was about to publish another "atheistic" book raised such a rumpus among the clergy that he let the matter drop. So, after his death, it was found in his room along with his letters and other unpublished work, and a few personal belongings. These comprised his entire estate.

Character. Of Spinoza it may be truly said that he was beloved by all who knew him. Frugal and simple in his living, he just managed to make both ends meet, month by month, but he never complained and was always cheerful, friendly and kindly. Nor was there any pride of the intellect about him. He was as affable with the humble as with his learned friends, and among his sincerest mourners was the

family with whom he lodged. Nor did he try to make converts to his teaching, but in this, as in all other matters, he was content to live and to let live.

II. EXTERNAL SOURCES OF SPINOZA'S PHILOSOPHY

The external influences on Spinoza's philosophy are a matter of dispute. His Jewish philosophical heritage comprised a knowledge of the medieval commentators, as, for example, Maimonides and Avicbron, who themselves inherited Arabic Aristotelianism and Neo-Platonism and the Arabic cult of the "active intellect" and the inclination to interpret the Aristotelian doctrine of the eternity of the universe in the light of the Neo-Platonic pantheistic theory of emanation. With Bruno, too, he was acquainted. We know also that he had at one time been much impressed with Descartes, whose enthusiasm for the uses of mathematics he shared but with whose conclusions he had come totally to disagree.

Nor can he have been ignorant of the advances and discoveries in empirical and experimental science that were going on about him, though they may have seemed to him an inadequate substitute for the power, in which he so firmly believed, of a mathematically disciplined reason to solve all the problems raised by the question of the nature of Reality. We can seemingly see all these factors at work in his thinking, but not in such wise as to detract from the independence and originality of his thought. Of that there can be no doubt.

III. REFERENCE OF FREEDOM OF THOUGHT

An indispensable condition of sound philosophic speculation is, Spinoza feels, complete freedom of thought and expression for the individual in all matters. Over such freedom, he claimed in the *Theologico-Political Tractate*, neither Church nor State should exercise any restrictions whatsoever. To ensure this, it is above all necessary that civil government should be liberated from all ecclesiastical domination or interference, and to effect this liberation the claims of the Church and of religion in general to revealed and divine authority must be demolished.

The Eternal Good. Such demolition Spinoza tries to accomplish by a criticism of the pretensions of the Bible to divine inspiration. He challenges the accuracy and reputed authorship of the books of the Old Testament and the boast of the Jews to be the "chosen people."

✓Religion, he points out, is not to be confused with theology or any one religious system. The miracles upon which theologians rely as evidence of their particular faith are inconsistent with the concept of a divine order, and are therefore self-contradictory. Belief in them is, however, natural enough, and has perfectly good natural explanations. So, too, the whole Christian scheme of the Redemption is incredible. Jesus was a man like other men, but a man whose mind was peculiarly attuned to the order of the universe, and whose will was directed towards the eternal good.

In the unfinished essay *On the Amendment of the Understanding*, found along with the *Ethics* among his effects, we get further light as to what this eternal good is. It lies not in riches or fame, which are transitory, but in fixing the affections upon an object in which there is no change or decay. This object is found in the knowledge of the union existing between the mind and the whole of nature, in other words, in the knowledge and acceptance of the true nature of the Real.

Next, Spinoza proceeds to lay down the criteria for distinguishing this true and adequate knowledge, in which the mind finds its fulfillment and its peace, from inadequate and confused ideas. But as this portion of the essay is repeated in the *Ethics*, we need not concern ourselves with it now.

IV. GOD

Necessary Characteristics of Reality or God. In the *Ethics* Spinoza attempts the task of setting forth a complete philosophical system in the form of a geometry in which each proposition is supposed to follow from its antecedents with the same necessity as governs the deduction of one Euclidean proposition from another. He begins by laying down a series of *definitions*, resting upon broad necessities and distinctions of thought and experience. In applying these definitions to the universe and developing the resultant series of propositions we must be guided by certain *axioms*, like the laws of self-contradiction and excluded middle, the principle of sufficient reason, and the assumption that the nature of the Real is rational and, conversely, that reason is the test of truth.

From these it appears that we can accept as ultimately real only what we can conceive as *self-caused*, *self-existent*, *free* in the sense of being self-determined, and *eternal*, or unaffected by time. Thus prepared, Spinoza plunges into a geometrical demonstration, proposition by proposition, that the universe, or totality of existence, alone fulfills the specifications reason demands for what it will consider real, and

that only one such universe or Reality can be conceived and therefore exist. Such a being we will call God. All else, Spinoza goes on, we must define either as an essential quality of the Real, which we will call an *attribute*, or as an unessential modification or *mode*, whose reason for existence is found in some preceding object or event.

Incidentally, Spinoza's use of the term God is apt to be confusing, since for us, because of the Christian tradition, the word "God" immediately and inevitably suggests a personal being; whereas, for him, as we shall see in a moment, it has no such connotations. Indeed, we shall understand him better, if we substitute in our minds a neutral term without personal implications, like Reality, or the Real, or, to use his own word, *Substance*.

The Attributes of God. If, next, we ask what is the nature of Reality, reason perceives that it is both a *thinking* and *extended* being. In other words, and here Spinoza finds his solution for the Cartesian problem of the relation of thinking and extended substance, mind and matter are not even derived and dependent *substances* as Descartes thought. They are rather *attributes* or essential characteristics of the nature of the Real. God, the only true substance, is as really an extended, spatial order of physical objects as he is an immaterial, unextended system of thoughts.

But, if God is as truly physical as he is mental, and *vice versa*, and if his essence is expressed with equal completeness in both attributes, then every modification or expression of his nature must have a double manifestation. There will be, nowhere in the length and breadth of infinite space an occurrence without a mental "correlate," nowhere in the infinite richness and variety of God's thinking a thought that is not linked with a physical "other half." These "correlates" do not *cause* each other, any more than the concave side of an arc causes the convex, or *vice versa*. But just as the concave and the convex everywhere accompany and involve each other, so Thought and Extension must be conjoined in a one-to-one correspondence. In short, we have in Spinoza a complete "psycho-physical parallelism," which obtains throughout the entire universe.

The Infinity of Attributes. But this is not all. Since the Real must necessarily be conceived as unlimited and infinite, its nature must be expressed in an infinite number of ways besides the two that our minds are able to perceive. Not only, therefore, is God infinite Extension and infinite Thought, but he is also infinite in an infinity of other attributes of whose nature we can have no inkling. "God, or substance, consisting of infinite attributes, of which each expresses eternal and

infinite essentiality, necessarily exists.”² The humblest object that we touch is infinite beyond all comprehension, turning to us, as it does, but two of its countless facets.

The doctrine of infinite Attributes has given rise from the beginning to difficulties and to differences of opinion as to his meaning. Especially perplexing is the relation of the unknown Attributes to the Attribute of Thought which, in us at least, knows only the Attribute of Extension. To an objector named Tschirnhausen Spinoza wrote in terms suggesting that each Attribute was apprehended by a corresponding form of thinking—which might suggest that within thought itself there is an infinite number of thinking Attributes, each of which stands to some one of the Attributes unknown by us as our thought stands to the Attribute of extension which it alone knows.³ Or he may mean simply that, since the Real is rational, the unknown Attributes, though they lie beyond the grasp of *our* minds, are nevertheless intelligible. But with this disputed question we have no time to deal more fully.

The Activity of God. “From the necessity of the divine nature,” Spinoza continues, “must follow an infinite number of things in infinite ways—that is, all things which can fall within the sphere of infinite intellect.” The fecundity of the Real is limited only by the law of self-contradiction and the bounds of logical possibility. Somewhere everything possible has actual existence. God, then, is the cause of all things.

But things do not proceed from God as from a creator existing outside and prior to them. Nor do they exist at the command of his will or to fulfill a purpose on his part. Spinoza is no less outspoken than Descartes in his rejection of final causes as explanations. To attribute purposes to God is to transfer to him our own interests, prejudices, and desires, and to destroy his perfection by representing him as pursuing unrealized ends and therefore as incomplete.

We say, for instance, that God is *good*, meaning thereby that he likes what we like. We announce that he is without *evil*, meaning thereby that he lacks those qualities that happen to be obnoxious to *us*. We assert that there is a divine *order*, or, in other words, that God has created things in such wise that they are most easily remembered and pictured by mankind; and we denounce as *disorderly* whatever puts any tax upon the human memory or imagination. So, too, im-

² This and other quotations from and references to *Ethics* are from the Elwes translation.

³ Cf. *Epistles*, 63, 64, 65, 66.

posing out own preferences upon nature, we speak of things as absolutely *beautiful* or *ugly*, and believe that God must share our esthetic as well as our moral tastes. But "things are not more or less perfect, according as they delight or offend human senses, or according as they are serviceable or repugnant to mankind." This should be sufficiently attested by experience, which shows "by infinite examples that good and evil fortunes fall to the lot of the pious and the impious alike," and that the Real, therefore, is not actuated by ethical considerations. In short, "the perfection of things is only to be reckoned from their own nature and power."

Teleology Inadmissible in Scientific Explanations. Finally, teleology is death to scientific investigation, since whenever it runs up against a difficulty and is in want of an explanation, it gives up the search for the natural causes of the event and appeals instead to the "will of God—in other words, the sanctuary of ignorance." For example, men are prone, when surveying the intricacies of the human body and the way in which all its organs work together, to conclude, because of their ignorance of the causes of so great a work of art, "that it has been fashioned, not mechanically, but by divine and supernatural skill, and has been so put together that one part shall not hurt another. Hence anyone who seeks for the true causes of miracles, and strives to understand natural phenomena as an intelligent being, and not to gaze at them like a fool, is set down and denounced as an impious heretic by those whom the masses adore as the interpreters of nature and the gods."

V. THE RELATION OF THE UNIVERSE TO GOD

The Universe the Necessary Expression of God's Nature. But if God is neither an efficient nor final cause of the universe, how does he cause it? By logical necessity, Spinoza replies. The existence and nature of the universe follow from the nature of God, just as the existence and equality of its radii follow from the nature of the circle. God and the universe are one thing. As the immanent nature and essence of all things, determining each modification of the attributes of thought and extension to be what it is, and to occur when, where, why, and how it does, God may be called, as Bruno called him, *natura naturans*. As the aggregate of Attributes and *modes*, or particular mental and physical events that articulate and segment the Attributes of Thought and Extension—and the other, unknown Attributes as well—he may be called *natura naturata*. But the difference between the two is simply

the difference between an object regarded in its entirety as a single, coherent whole and the same object regarded as the sum of its parts with the accent on their multiplicity and dispersion.

If, then, we inquire into the cause of any particular physical or mental event, we find that the reason for the occurrence is twofold. The *immediate* cause lies in some antecedent and contiguous event. But the reason why particular events have the causes and the effects they have, and no others, lies in the nature of the universe of which chains of efficient causation are part. The constitution of the Real is such that the modifications of the Attributes *must* occur in a certain order and no other. Hence a given physical or mental event *must* be preceded by *this* antecedent and followed by *this* consequence. Thus *efficient* causation is an expression of the logical, formal necessity of God's being the kind of being he is and expressing himself as he does.

In such a Reality there is no room for freedom in the popular sense of the word. "Things could not have been brought into being by God in any manner or in any order different from that which has in fact obtained." Our motives are inexorably engendered by preceding conditions, and our volitions follow as necessarily from our motives as physical effects follow from physical causes. Freedom, as we shall presently see, means to Spinoza something different from liberty to act undetermined by antecedent motives and circumstances.

Substance and Attributes. There is, however, one difficulty we must refer to before proceeding. How, it has frequently been asked, does Spinoza conceive the relation of the Attributes to the infinite Substance whose essence they reveal? Does he think of Substance as a substratum underlying the Attributes, which would still be there if the Attributes were removed? Or does he think of it as completely exhausted and contained in the sum of the Attributes? The answer seems to be that Spinoza at least meant to think of Substance, not as something underlying its Attributes, but as fully taken up and expressed and exhausted in them.⁴ At the same time, the propensity to think of a thing as having more to it than its qualities is so strong in the human mind that we may wonder whether he could entirely rid himself of the notion of a substratum which would still be there even if its Attributes were taken from it. However, this perplexity need not further detain us.

The Infinite Modes. We have noted that God and the universe are for Spinoza, as for Bruno, one and the same thing looked at in two

⁴ Cf. Pollock, *Spinoza*, pp. 152 ff.; Joachim, *A Study of the Ethics of Spinoza*, pp. 14 ff.; McKoon, *Philosophy of Spinoza*, pp. 187 ff.

different ways. So, too, we may take a double view of both of the Attributes. Extension may be regarded either as a single indivisible nature, or as the infinite collection of particular extended objects in which that nature is displayed. Regarded in the latter fashion it is called by Spinoza "the face of the entire universe," and is designated as an "infinite mode." The same designation is applied to motion and rest, which are universal characteristics of Extension, and are the source of its diversification into individual extended objects. In like manner, the activity of Thought which, accompanying rest and motion, produces the individual modes of thinking corresponding to physical events, is called by Spinoza an "infinite mode of thought," or "intellect absolutely infinite." There is some uncertainty whether he distinguished another infinite mode of that Attribute consisting of the aggregate of its individual modifications, and corresponding to the "face of the entire universe." But some critics feel that he had this in mind, when he spoke of the "infinite idea of God."⁵ However, as the "infinite modes" play little part in his system, we need not discuss them further.

VI. NATURA NATURATA

Spinoza is now ready to proceed from God as *natura naturans*, or the one Substance of whose nature all things are the co-equal and co-eternal manifestations, to God as *natura naturata*, or the sum total of events in which that nature equally deploys and displays itself in space and time. To the human modifications of his nature, God, as we have just seen, manifests himself as two correlated systems, one of interconnected physical events, the other of correspondingly interconnected *ideas*. These two systems must run exactly and completely parallel to each other, since they are two ways of exhibiting one and the same nature each one of whose modes is simultaneously expressed in all its Attributes. Hence any modification of that nature will be simultaneously registered in its entirety in the two Attributes that fall within our ken. "The order and connection of ideas is the same as the order and connection of things."

Just what Spinoza meant by these *ideas*, and how he conceived the mental correlates of bodies and of their motions and changes, is a question that has provoked difference of opinion. Since there are *ideas* of inanimate as well as animate physical objects and processes, *ideas* can scarcely be regarded as individual psychical entities, like souls or minds for example, attached to all particular things. Nor, since for

⁵ Cf. Joachim, *op. cit.*, pp. 83 ff.; Pollock, *op. cit.*, pp. 100 ff., p. 176.

Spinoza, as we shall see in a moment, the infinite intellect of God is impersonal, can they be the *thoughts* of a self-conscious mind reflecting upon the order and connection of physical events. One is tempted rather to think that the *idea* meant for him what we should call the *truth* about each particular physical event—and this all the more so, as the infinite intellect of God, which comprises the totality of *ideas* that modify the Attribute of Thought, seems to mean the whole truth about the entire universe, entertained by a mind unconscious of itself as a thing apart from that truth. In any case, we must avoid many of the connotations the word *idea* has for us, and shall do better to substitute for it in our minds a non-committal term like *mental correlate*.

VII. THE HUMAN AND THE DIVINE MIND

The Nature of Man. We turn now from the general characteristics of *natura naturata* to one of its incidents—*man*. Since man is one of the infinite number and variety of the modifications of the divine Substance, he will, like all else, share not only in its Thought and its Extension, but in the myriad of other Attributes that lie beyond our ken. Our minds and our bodies are but two segments of the immensity of our being. They are not superficial appearances, for they cleave to its center and to the center of Reality. But beyond and about them, radiating from that same center, is the infinity of what we are as modes, also, of the other Attributes of God. We all of us, then, live and move and have our being in countless other worlds besides our own, undreamed of and inconceivable. Our every act and thought register in terms of extension and consciousness a modification occurring simultaneously throughout the endless number of all the other, unknowable forms of our existence.

Like all else, we are, so far as God exhibits himself in us in terms of Extension and Thought, a correlation of a physical and a mental event. The "idea" correlated with a human body is a human *mind*. There can be no interaction between them, but the parallelism between them is complete. Nothing can occur in the body without a corresponding registration in the mind, nothing in the mind without a correlated change in the body. Changes in the body are occasioned in the body only by physical causes, changes in the mind only by antecedent modifications of consciousness. But the two chains of causation are interwoven link by link, so that to all intents and purposes one psycho-physical situation causes another psycho-physical situation.

Self-Consciousness. The *idea* correlated with the human body has

a characteristic that we do not observe in the mental correlates of other than human bodies. It not only reflects the make-up, native activities, and modification by other physical events of the physical organism of which it is the registration in the Attribute of Thought; it also reflects *itself*, and in so doing reflects *upon* itself. In Spinoza's phrase, it is not only an "idea of the body"; it is an "idea of the idea of the body," or "idea of the mind." In short, it is *self-conscious*.

Whether the mental correlates of other bodies, animate or inanimate, are also self-reflective and self-conscious is a question Spinoza does not raise. By implication, the *ideas* of so-called *inanimate* bodies would seem, in his opinion, not to be so. The nature and status of *animal* consciousness is not discussed. In man, however, self-consciousness is an observed fact, and it is with man alone, and with his relation to the universe, that the rest of Spinoza's philosophy is chiefly concerned.

In any case, only a particular and partial modification of the Real can be self-conscious. For self-consciousness can accompany only an *idea* that reflects both its own body and *other* physical events by which that body is surrounded and with which it is in *contact* and *conflict*. Without such registration within itself of the existence of an *external* environment, an *idea* would have nothing from which to distinguish and set apart both itself and the body with which it was correlated. Hence it could not recognize itself as one event among others, as *this* event rather than *that* and as *itself* rather than something else. But it is precisely such recognition of apartness that constitutes the "idea of the idea," or, in other words, the self-reflective character of the "idea of the human body" which makes that idea a self-conscious mind.

Self-consciousness and "personality" are, then, for Spinoza, the mental correlates of limited and finite beings and are expressive of the alienation of the part from the whole to which it belongs and from which it draws its true significance. They are centered in and about the particular location, situation, and fortunes of a particular event, and reflect the importance and central position in the universe each such event necessarily assigns to itself precisely because of its partial and circumscribed character. Hence they are associated, not with the essential characteristics and relations that unite the mode with the whole of nature, but with the special idiosyncrasies and interests that sever it from and oppose it to the necessary order and connection of events in which it occurs and that emphasize its particular and fragmentary character.

Human and Divine Intellects Contrasted. Conversely, the infinite intellect of God must be impersonal. For, instead of being associated, like the human mind, with a particular body, surrounded by other bodies of which it is not the correlate or "idea" and by other "ideas" associated with these bodies, it has as its physical correlate the content of all space and time. It has, therefore, no environment from which to distinguish and with which to contrast itself. In short, it is free from the *intellectual* conditions of self-consciousness.

Moreover, having no particular body, and being associated with no particular part, it feels none of the passions, interests, prejudices and personal loves and hates that reflect the contact, the conflict, and the modification of a particular human mode with and by other modes. For how should a whole, all of whose parts are equally expressive of itself, love or hate or favor any one of them above another? The mind of God, then, being without desire, will, preference, or any emotional disturbance, is as free from the "affective" as it is from the intellectual conditions of self-consciousness and personality.

Of Spinoza's insistence that to think and know as God thinks and knows is to transcend self-consciousness and personality, there can be no doubt. That he so taught was recognized at once, and immediately gave, as it still gives, rise to the charge of atheism. His doctrine cannot but remind us of the Aristotelian "active intellect" which thinks impersonally in each one of us, and, in flooding our minds with the light of truth, obliterates our consciousness of our separate selves and identifies us with the object we are contemplating. With the Aristotelian teaching Spinoza must have been familiarized by Hebrew commentators, like Avicbron and Maimonides, in whose systems it played so important a part. However that may be, the view that God is impersonal occupies a central position in his philosophy.

The Essential Impersonality and Impartiality of the Human Mind.

Although a human mind and the particular body with which it is correlated constitute a fragmentary, local, and ephemeral modification of Thought and Extension, they nevertheless partake of and display the universal and unchanging essence of these Attributes. Hence, since the Attribute of Thought is *essentially* a comprehension of the truth, the whole truth, and nothing but the truth about the constitution of the universe, the human mind also is *essentially* a complete understanding of the true nature of the Real. Personality and self-consciousness are *accidental* obscurations of its essence by its particular association with a particular body. And, since the Attribute of Thought is co-extensive with the Attribute of Extension, the human mind is capable

of extending in its thinking and point of view its physical base from the particular body of which it is the mental correlate to *all* the bodies that constitute the physical universe. It is thus able to conceive itself as equally correlated, like the infinite intellect of God, with all objects and events instead of with one of them, and as viewing all that occurs from the standpoint of the universe as a whole rather than from that of a single incident in the universe.

Human Happiness and Truth. Since it is the essence of the human mind to know the truth, we naturally strive after knowledge, and to the degree that we attain it we are realizing our true selves. Hence the progressive identification of the human mind with the infinite intellect of God is accompanied by an ever greater sense of happiness. Knowledge of the union of the mind with the whole of nature is, then, as Spinoza pointed out in *On the Amendment of the Understanding*, man's only true and unfailing good. And it is the application of this knowledge to our dealings with the rest of nature, and particularly with our fellow-men, that is the basis of the *good life* and of *moral conduct*. Furthermore, since such knowledge makes us at last at home in the world and at peace with ourselves and the rest of nature, its attainment spells salvation. By it we are delivered from bondage to our specifically human estate and made one with the divine mind.

The Obstacles to Knowledge and Happiness. A large part of the *Ethics* is devoted to discussing the obstacles that stand in the way of our transcending the self-consciousness and self-centeredness imposed upon us by our position, as one event among others, in the necessary order and connection of things, and to describing the means of overcoming them. The two fundamental obstacles responsible for our shortcomings and unhappiness are *error* and *passion*. The human problem, then, is that of freeing our minds and hearts from them. To solve it Spinoza launches upon a detailed review of the human situation in the universe. ✓

VIII. PHYSICS, PSYCHO-PHYSICS AND PSYCHOLOGY

Man, being a body as well as a mind, is subjected to all the conditions to which the physical universe is subjected. In his description of those conditions, Spinoza is in essential agreement with Descartes. He notes the laws of motion and the persistence of structure and identity through change and growth, accepts Descartes' identification of matter with space and his corpuscular theory of its constitution, and

holds that the human body, being part of the physical order, must partake of the nature of matter, and, in its inner processes and give-and-take with other bodies, must be governed by physical laws. The biological functioning of the organism, therefore, is mechanical in character and explicable in minutest detail by efficient causation. Furthermore, the body, though an individual modification of the Attribute of Extension, is articulated into a complexity of organs, and these organs into an indefinite number of constituent parts.

Passing now to psycho-physics, we find that "the idea which constitutes the actual being of the human mind is not simple, but compounded of a great number of ideas," each one of which has its particular physical correlate. Moreover, just as the organs composing the body are divisible into material corpuscles, so these "ideas" are themselves compounded of registrations of physical ultimates. Finally, the same laws of causation hold for the order and connection of ideas as hold for bodily processes. Trains of thought are no more to be explained by the conclusions at which they arrive than are physical sequences. They, too, are motivated by their antecedents, not by their results.

From psycho-physics we pass to psychology. Since, according to the laws of physics, any modification of the body tends to persist until stopped by some new modification, so its mental correlate will persist until stopped by a new idea. Hence the mind retains images of past events and *remembers*. Furthermore, since every modification leaves some trace of itself in the physical organism, new stimulations of that trace will call up the old image associated with it, and the mind will *recall*. So, too, images may persist which are not referred to the past, in which case the mind *imagines*. Finally, if two modifications have occurred together, the recurrence of one will also recall the image of the other; that is, there is *association* of ideas.

IX. KNOWLEDGE OF THE EXTERNAL WORLD

With these preliminaries in mind we turn to the problem of knowledge and error. Our first question is that of the possibility of knowledge itself. If a man's mind is the mental correlate only of his own body, how can he know anything but his own body and the "ideas" correlated with it? The answer is that his psycho-physical state at any given moment is always a composite of both the nature of his own particular body and mind and of the nature of the external environment by which he is being influenced and modified. Hence his mind,

in knowing itself, will register, also, the "ideas" of the objects by which he is being conditioned. Furthermore, in proportion to the number and sensitiveness of his body's contacts with its physical environment, his experience is enriched, and the scope of his acquaintance with the nature of the Real is enlarged.

But, since there is no interaction between mind and body, and since our experience of the external world does not come into the mind from the outside, but wells up from within, how can the mind know when the ideas of which it is compounded are adequately representing the physical world and occupying their proper place in the necessary order and connection of ideas, and when they are not? In short, how are we to distinguish *true* from *false* ideas? For that matter, why should we even make the distinction between adequate and inadequate ideas?

Spinoza's answer is Descartes'. Some ideas are in themselves clearer and more distinct than others. A clearer and a more distinct idea is *intrinsically* a truer registration of its subject than a blurred and distorted one. We do not have to compare it with its subject to know that. And, since "the order and connection of ideas is the same as the order and connection of things," we can be sure that an idea which is perfectly clear and distinct in itself is correlated in our minds solely with its parallel event in the Attribute of Extension, and is covering that event completely and adequately. Moreover, such an idea will of necessity be occupying its proper place in "the necessary order and connection of ideas" that constitutes the truth about the universe.

X. THE NATURE AND SOURCE OF ERROR

If, however, it is the *essential* nature of the mind to entertain adequate ideas, how is error possible? We should expect the mind to distinguish its component ideas from one another, to correlate each with its parallel physical event, and to place it where it belonged in the Attribute of Thought. Plainly, then, error is not native to the intellect. It must be an interference from the outside with the natural and normal operation of our reason.

The source of this interference cannot be laid at the door of the *will*, as Descartes thought, for the will and the understanding are not two separate faculties operating independently of each other. Simply to entertain an idea is already to have *assented* to it and to have accepted it as clear or unclear, distinct or indistinct.

Error, rather, has its roots in the fact that our sensible experience—

or, as Spinoza calls it, our *imagination*—registers the nature of our own body as it is being modified by its environment, and the nature of other bodies as they are modifying our own. Hence it cannot give an exhaustive and adequate account either of our own organism as it is apart from its modifications by external bodies or of external bodies as they are in themselves apart from their effects upon us. Therefore, sensible images, whatever their stimuli, not only fail to distinguish and articulate clearly and distinctly the different factors co-operating in the modification of a human organism by external events, but also fail to spell out in their entirety the total natures of these factors.

Nor are generic ideas, or “universals,” in Spinoza’s opinion any improvement upon sensible images as instruments of true knowledge, for they themselves are nothing but blurred and confused and sensible composites of blurred and confused sensible presentations. They are useless, therefore, as means for analyzing images into their elements, and for assigning those elements correctly to their proper physical correlates, and thus placing physical and mental events in their *true* places on the maps of Thought and Extension.

The human mind, then, would appear to be dependent for its information and knowledge concerning the nature of the Real upon what Spinoza calls “knowledge from the mere suggestions of experience,” and upon the confused and inadequate ideas these suggestions are bound, in the nature of things, to suggest. True, its essence is knowledge of the Real. But can it manifest that essence under the handicaps imposed upon its operations by its association with a particular body and by the limited and muddled mentality consequent upon such association? Spinoza thinks it can.

XI. INTELLECTUAL MEANS OF ESCAPE FROM ERROR

Error Is Misplaced Truth. In the first place, it may already have dawned upon us that there is no such thing as absolute error, since even the most fanciful presentations, such as illusions and hallucinations, have, after all, their proper physical correlates, and, once they are referred to these correlates, turn from inadequate to adequate, from false to true, ideas. For example, says Spinoza, the sun appears to be about two hundred feet away. This idea is an inadequate mental correlate of the external physical situation, but it is an adequate idea or representation of the state of a body like mine when modified or affected by an external body of the real size and at the real distance of the sun. So, too, the feeling of free-will is an adequate or true

correlate of the confused and hidden character of the causes that determine our actions; it is an inadequate idea if referred to a real absence of determining factors.

Plainly, then, error consists merely in what we might call misplaced truth. It lies in correlating an idea with more or less than its actual counterpart in the Attribute of Extension, and it may always be corrected by discovering the physical datum of which the idea is the mental Siamese twin.

The Nature of All Thought and All Extension. Moreover, the means of correction are within our grasp. Even on the level of sensible presentation there occur certain indications of absolute truth useful to the mind as a handhold and foothold for climbing out of the spatio-temporal trap in which it is seemingly snared by its association with a particular body. Within its own finite nature and the finite nature of its physical correlate it finds characteristics that pertain to all Thought and all Extension in all times and places. For example, the laws of motion and the mathematical structure that we can infer from studying our particular portion of space and time necessarily hold good, in Spinoza's opinion, for the entire Attribute of Extension; and the laws that govern the rational operations of our own mind give us the structure of the entire Attribute of Thought. Furthermore, once in possession of these adequate ideas, the mind can deduce from them other ideas equally true and necessary, since "whatsoever ideas in the mind follow from ideas which are therein adequate, are also themselves adequate."

The mind, therefore, can overcome its finite handicap and know the absolute truth about the nature of both Thought and Extension. This truth is the basis of *science*. By reducing the complexity of presentation to the least common denominators provided by these adequate ideas, we can *understand* it and thus dispel our erroneous attribution of ideas to correlates with which they do not belong. Nay more, we can understand our errors, seeing how in the nature of things they must come to pass, and we can thus find place for them as natural facts in the natural world. For example, once we know the laws of physics and optics and apply them to the sun and to the human eye, we can understand how a body like the sun, modifying from a given distance a body constructed like the human eye, *must* produce the modification of the physical organism of which the seeming size and distance of the sun are the mental correlate or "idea." In short, we can give a scientific explanation of the discrepancy between the real and the seeming situation, and in so doing turn that which,

if taken at its face value, would be error into an enlightening example of scientific fact.

XII. INTUITIVE KNOWLEDGE

Understanding and Intuition. However, the mind's power to know is not exhausted by *scientific understanding*. We *understand* individual events by assigning to mental and physical occurrences their proper correlates, and by connecting psycho-physical situations with their proper *causes* and *effects*; that is, with the *antecedent* and *contiguous* situations that, in the necessary order and connection of events, determine their particular occurrence and location, and with the particular *subsequent* and *contiguous* situations whose occurrence and location they in their turn determine. But, no matter how far we carry this correlation and this connection in any direction, we find ourselves merely explaining one event by connecting it with another, without being able to explain further *why* that connection should be what it is, or *why* situations should have the causes and effects they have rather than others. Although, then, we may discover *how* any particular event fits into the necessary order and connection of things, we do not as yet grasp the necessity of that order's being necessary. We know the modifications of the Real only in terms of one another, not in terms of the whole of which they are parts, and of whose essence their causal relations and their order and connection are the necessary expression.


The Nature of Intuition. To bring knowledge to its full fruition we must, then, explain the modifications of God by referring them directly to his essence, as well as to one another, for their cause. To do so we must, so to speak, look down from above upon the universe as a whole, as well as along its surface from part to part. Thus seen, the Real reveals itself as a single, all-inclusive system of interrelated and causally interconnected events, in which the way these events determine one another to existence and modify one another's character and course is itself determined by the nature of the system in question.

The power to look down upon the universe as well as along it, to grasp its nature as a whole, and to explain the part not only by its connection with other parts but as a necessary expression of the divine essence, the human mind possesses by virtue of its essential identity with the infinite intellect of God. And its ability to exercise that power, in spite of its fragmentary, local, and ephemeral character, is due, like its ability to understand, to the fact that every modification of the

Attributes of Thought and Extension exhibits their essential and universal characteristics. Hence, our minds are able not only to *understand* the particular causes of particular events, but also to construct from so much of the Real as falls within our ken an adequate idea of the universal Plan or Pattern to which *all* the modifications of both Attributes throughout infinite space and time must conform. In Spinoza's own words, "The human mind has an adequate knowledge of the eternal and infinite essence of God." This knowledge it can discover and develop within itself, if only it will set itself to the task, and in attaining it, it recovers its birthright of vision "under the aspect of eternity."

XIII. ERROR AND THE PASSIONS

Self-Assertion and Preference. But is it within the power of the human mind to set itself to the task of shaking off its errors and attaining vision under the aspect of eternity? Hitherto we have been treating human beings as if they were static and stationary fragments of Thought and Extension, in *contact*, to be sure, but not in *collision* with other bodies. And we have dealt with error as due merely to mixed and confused experiences correlated with modifications of the human body from without, by which the human mind might be perplexed, but was not otherwise disturbed.

The human body, however, like all other modifications of Extension, possesses inertia and changes its state or place in accordance with the universal laws that govern all alteration and locomotion. Hence, like all other bodies, it tends to persist in any given position or motion, and to resist any interference with that position or motion by the action of other bodies upon it. The mental correlate of this obedience to what we now call the first law of motion is self-assertion and volition. We *wish* and *endeavor* to preserve ourselves, and to have and go our own particular ways. And we naturally *prefer* those modifications of our own bodies, and the bodies to which those modifications are due, which further our self-preservation and self-assertion. Then we *seek*, *welcome*, and *embrace*, whereas we naturally *avoid* and *combat* those other modes of the Real whose action upon us is harmful or obstructive to our self-preservation and self-assertion. 

The Influence of Value Judgments on Truth Judgments. So it is that the ideas of which the human mind is compounded differ in *pleasantness* as well as in clearness and distinctness. Some are most grateful, others extremely distasteful, to us. And their pleasantness or

unpleasantness becomes confused with and substituted for clearness and distinctness and the reverse in our minds. Our impulse is to feel that *agreeable* ideas are more adequate representations of the true nature of Reality than *disagreeable* ones, and to discredit and reject as confused and indistinct, and therefore erroneous, ideas that we do not *like*. Hence, we tend to conduct our thinking, not impartially and according to the laws of logic, with a view to discovering what ideas are *true*, but according to our particular, self-centered preferences and prejudices with a view to establishing the truth of those ideas that we find *agreeable* and flattering to ourselves. In short, our attribution of ideas to their proper objects is not hampered solely by the intellectual confusion associated with the physical confusion of bodily modifications. It is vitiated also by "wishful thinking," which, for the sake of satisfying desire, assigns objects to ideas and ideas to objects in the correlation most pleasing to our self-esteem, our loves and hates, our hopes and fears.

Of this confusion Spinoza has already given major examples. We *want* to be free, and therefore we see in our feeling of freedom the correlate of an objective liberty, rather than the ignorance correlated with the inability of body and mind to record distinctly the causes of their behavior. We *want* to think that we are the darling of the gods and that the universe is run for our benefit. Hence we correlate everything in it that benefits our body and pleases our mind with a divine purpose rather than with a mechanically determined and necessary order and connection of events.

XIV. THE EMOTIONS

The Nature of Emotion. Plainly, then, we must investigate this affectional, emotional, volitional aspect of the mind, to the end that we may discover both the part it plays in the production of error and any suggestion it may make as to how the errors for which it is responsible may be corrected. So it is that in Book III of the *Ethics*, Spinoza develops his theory of the emotions. He begins with definitions and axioms that define *activity* and *passivity* as respectively conditions in which both mind and body are determined to action by their own natures or by the natures of external things, and that therefore equate them on the mental side with *adequate* and *inadequate* thinking. He also notes the capacity of the body for being "affected in many ways, whereby its power of activity is increased or diminished, and also in other ways which do not render its power of activity either

greater or less." And he defines *emotion* as "the modifications of the body whereby the active power of said body is increased or diminished, aided or constrained, and also the ideas of such modifications." When emotion arises connected with our "adequate" causation of our behavior, it is an activity; otherwise it is a *passion*, or state wherein the mind is being acted upon.

Furthermore, the mental correlate of an increase of the native activity of the body through beneficial external stimulations is *pleasure*, and of the reverse, *pain*. Under the influence of the one the organism enjoys also a feeling of general well-being, or "merriment" as Spinoza calls it; under the influence of the other it becomes depressed and "melancholy." The natural search for beneficial stimulations and avoidance of harmful ones is correlated with love or hate of external objects and of their mental representations, according as those raise or lower the state and sense of well-being.

Derivation of All the Emotions. Out of the three elementary emotions of desire, pleasure, and pain, taken in conjunction with the laws of association, Spinoza develops the whole body of emotions by which the mind is affected. In connection with memory and anticipation, they beget feelings of hope and fear, of confidence and despair, of relief and disappointment. Through the workings of association, love and hate are extended from the external causes that heighten or lower our pleasure and well-being to the things that benefit or damage these causes; and, once more, to whatever helps or harms these things, and so on. Hence we naturally rejoice, in ever-widening circles, over the well-being of what brings us good and the downfall of what brings us ill, and we sorrow over the opposite. Nay more, we tend to reproduce and imitate in ourselves the emotions under which we see other beings like ourselves laboring, though these beings are neither loved nor hated by us.

The mere sight, then, of pleasure and pain and of well-being and misery in other human beings will arouse similar feelings in ourselves. Therefore we feel pleased and perfected by pleasing and benefiting others, and pained and harmed by paining and harming them. So it is that men are naturally imitative and social and altruistic, and that their loves and hates, their envies and their pities are motivated by crowd psychology, the approvals and disapprovals of their fellows, and sensitiveness to public opinion. We estimate ourselves in terms of what other people think of us. By association we tend to love or hate whatever is loved or hated by our friends. And our natural hatred of those who hate what we love gives rise to class and sectional and national

antipathies. Still, we can never utterly rejoice at the destruction of what we hate, since the idea of destruction is in itself a painful idea. Conversely, we can feel joy in remembering past evils. This ambiguous interrelation of hate and love enables us to overcome hatred and to turn it into love, or to diminish it by associating it with other causes than the hated object. Moreover, the more inevitable and necessary these causes seem to be, the less the hatred they engender. Complete understanding of the necessity that makes the hated object what it is transforms hatred into compassion or into detached scientific interest. Incidentally, this possibility of converting hate into compassion or scientific interest is of great importance in Spinoza's system. Without it salvation and the attainment of the eternal good would be impossible.

So far, the emotions with which we have been dealing have been passions connected with the modification of our body and mind by external things and their ideas. If we add to them passions like gluttony, drunkenness, lust, avarice, and ambition, which are exaggerations of our natural affections for certain classes of outer objects, we have perhaps discussed them sufficiently to indicate Spinoza's treatment of the subject.

Besides the passions, there are certain pleasurable or painful states or emotions that accompany the essential activity of the mind unmodified by the pressure of the outer world. These emotions, correlated as they are with the exercise of reason, will be themselves, not irrational, like the passions, but rational, and will exhibit strength of inward character. They are courage, or desire for self-preservation and self-assertion governed by the dictates of reason, and highmindedness, or generosity of nature, which lies in aiding and loving one's fellow-men as a man motivated entirely by reason should.

XV. HUMAN GOOD AND EVIL

It must be plain from what we have just been saying that *good* and *evil*, *right* and *wrong*, are purely relative to human interests. What in the necessary order and connection of events *benefits* the preservation, self-assertion, and self-realization of the human race we call *good*; those modifications of the Real that tend to destroy, or harm, or interfere with human self-expression we call *evil*. So, too, human action is *right* or *wrong* according as it tends to further or obstruct the self-fulfillment of human life. The human moral order, then, is centered upon and revolves about that particular mode of the Real we call *man*. By implication, other self-conscious modes, differently organized and

situated from ourselves, and with other interests than ours, might conceivably be the centers of moral values and systems at variance with one another and with human ethical standards.

But the distinction between good and evil, right and wrong, does not exist as such in the infinite intellect of God. Seen "under the aspect of eternity," all things, in whatever relation they may stand to our particular human interests, and all human actions, whether virtuous or sinful from the human point of view, are equally complete, adequate, and perfect expressions of the nature of the Real. Hence, neither human moral distinctions nor the particular good and evil of any other mode of Reality can be conceived as receiving special cosmic sanction and support. God fulfills himself as clearly and distinctly, as adequately and perfectly, in the ways that harm us and in the harm they do us, as in the ways that benefit us and in the benefit they do us. What is good or evil, right or wrong, from the point of view of the part, is merely and equally *necessary* from the point of view of the whole.

XVI. THE GOOD LIFE FOR MAN

Man's Pursuit of His Good. Nevertheless, man, in learning to view things from the standpoint of the whole, will not thereby become himself *indifferent* to his own particular interests and to the distinction founded upon them, between what is good and evil, right and wrong for *him*. For he will see that it follows from an "adequate knowledge of the eternal and infinite essence of God" that he, as a special modification of the Real endowed with the drives and desires characteristic of that modification, must live his particular form of life in a certain way, if he is to preserve and assert himself and realize his desires. He will, to be sure, learn to accept what he must in the nature of things. But he will also be encouraged to utilize to his advantage what he can modify in such wise as to aid his self-preservation and self-assertion, and to destroy that which is destructive to them, or, when he cannot do so, to protect himself against it. For the nature of the Real necessitates such self-assertion on the part of all its modifications according to their several natures. Hence, that man, also, should so act is a part of the necessary order and connection of things, and the condition of his continued existence as an expression of God's essence.

The Criteria of Good and Evil. In the third and fourth books of the *Ethics*, entitled respectively *Of Human Bondage* and *Of Human Freedom*, Spinoza discusses human good and evil, and the means of

promoting the one and of overcoming the other. The distinctive character of the human modification of the Real lies in its power to *know* of its union with the whole of nature, and to survey all the modifications of that nature, including itself, "under the aspect of eternity," in their proper places in the necessary order and connection of events in which the infinite and eternal essence of God is displayed. Hence that in man which he will endeavor and desire above all else to preserve and assert will be his capacity for *knowledge*. It follows that such emotions and activities as foster the power to *know* will be *good* emotions and *right* behavior, and that such as impair it will be *evil* and *wrong*. As we have just seen, this distinction coincides with that between the emotions and behavior we call *active* and those we call *passive* and the conduct motivated by them. They coincide, furthermore, with the emotions and conduct we call *rational* and those we call *irrational*.

• **Implications of Human Morality.** To establish what is right and wrong we have only to ask specifically what benefits us, or, in other words, what is most harmonious to us. That is most harmonious with which we have most in common. What we have most in common with is our fellow-beings. Therefore, the interest in our fellow-beings, with which the psychology of the emotions has shown that we are necessarily endowed, is a *good* interest conducive to the expression of the rational part of our nature. Altruism and social harmony are the natural goods of a rational being.

In so far as men live in obedience to reason, they necessarily agree and by their agreement render their common exercise of reason easier to maintain and their common joy in knowledge of the truth the more secure. Dissension among men arises only when and in so far as they are a prey to their passions. True, in the absence of reason the fear of being harmed is an emotion strong enough to control the impulse to harm others. But a rational being has no need of such restraint. His exercise of his sovereign, natural and inalienable right to self-preservation and self-assertion, his competency to judge for himself what is right and what is wrong for him, his necessary pursuit of what is useful and his innate propensity to cherish what he loves and to destroy what he hates, cannot bring him into conflict with his fellows, since what is *truly* helpful or harmful to the self-preservation of one man is helpful or harmful to all men alike.

• The state comes into being as an aid to the life of reason. It imposes certain restrictions upon the indulgence of human passion, disobedience to which we call *sin*, obedience to which acquires *merit* for

us. But, were man not a prey to his passions, and were he completely free to express his rational nature, the state and the restrictions it imposes on us would be unnecessary. Men would live in spontaneous harmony with one another, and there would be no sin and no merit.

XVII. THE CONTENT OF THE GOOD HUMAN LIFE

The All-Inclusive Character of the Good Life. In what kind of a distinctively human life will, then, the prevalence of reason in the individual and the state permit and encourage man to express his modal and finite characteristics? The answer is that the life of reason will be liberal, rich, and well-rounded. Its physical activities will be as complete as possible. The more capacities for experience and action the body has, the greater, Spinoza insists, is the mind's capability of perception and of activity. Moreover, "pleasure in itself is not bad but good; contrariwise, pain in itself is bad." Therefore, life is to be lived and enjoyed to the utmost, not denied. Again, if the mind is to be strong and healthy, the body correlated with it must be so, too. The man who is actuated by reason will therefore care for his body and give proper exercise to all its functions.

Finally, social life is not to be regarded as a mere means to the better exercise of the activity of knowledge. It is pleasant in itself, and as such its amenities are an essential part of the good life. Part of virtue is to laugh and to make merry, for "assuredly nothing forbids a man to enjoy himself save grim and gloomy superstition." Indeed, "the greater the pleasure wherewith we are affected, the greater the perfection whereto we pass; in other words, the more must we necessarily partake of the divine nature. Therefore, to make use of what comes our way, and to enjoy it as much as possible (not to the point of satiety, for that would not be enjoyment) is the part of a wise man. I say, it is the part of a wise man to refresh and to recreate himself with moderate and pleasant food and drink, and also with perfumes, with the soft beauty of growing plants, with dress, with music, with many sports, with theaters and the like, such as every man may make use of without injury to his neighbor." For thus the body is kept in condition "for performing all the actions which follow from the necessity of its own nature," and thus the mind is kept open and "capable of understanding many things simultaneously."

At the same time, our enjoyment must always be checked and moderated by reason. There is no such thing as excess of joy or being too happy. Pleasure is always a good. Pain and a severe and dour outlook

on life are always bad. But it is also bad to become too addicted to one pleasure to the exclusion of others. Moreover, pain and grief may often be useful and therefore good in restraining overindulgence and in preventing an isolated pleasure from becoming so excessive as to hinder rather than heighten the activity of the body as a whole.

The Passive and Evil Emotions. We have now to mention the passive emotions which interfere with the exercise of reason and with rational living. First of these comes hatred of our fellow-men, and its evil brood of envy, derision, contempt, anger, revenge, and the other passions it begets. "Whatsoever we desire from motives of hatred is base, and in a state unjust." Fear and hope, overesteem and disparagement, pity, humility, and repentance, overweening pride and too great dejection, and desires aimed, not at the pleasure and well-being of the whole, but at the satisfaction of some single craving regardless of the best interests of the entire man, are either useless or positively detrimental to true happiness. They are, therefore, irrational passions. Some of these passions, too, reflect the false perspective of time with its consequent overemphasis of the present as against the future and the past. :

Naturally, it is of the essence of reason to resist them, and to preserve itself and keep its head in their midst. So far as we act rationally, for example, we tend to correct the false perspective of time and to give equal weight to ideas regardless of their temporal reference. We detect and discount the importance spuriously added to an event by its presence or subtracted from it by its futurity, and when confronted with a choice we prefer and pursue a greater future good rather than the lesser present one at which the unthinking and the vulgar clutch.

Again, reason casts out that arch-enemy of human happiness, fear in all its forms. The behavior of the rational man is actuated by the pleasure he takes in living rationally. The good life is an end in itself. To live it from fear of living otherwise and in order to escape evil is the mark of an irrational mind. A morality, therefore, founded upon fear is a false and dangerous morality. "Superstitious persons," Spinoza remarks, "who know better how to rail at vice than how to teach virtue, and who strive not to guide men by reason but so to restrain them that they would rather escape evil than love virtue, have no other aim but to make others as wretched as themselves." Wherefore, he adds, "It is nothing wonderful if they be generally troublesome and odious to their fellow-men."

Furthermore, reason rids us of our obsession about death. The wise man, free from all fears and occupied with realizing to its fullest life

while it lasts, has no time or emotion to waste over thoughts of death. "His wisdom," says Spinoza in one of his most famous phrases, "is a meditation not of death but of life."

The Good Life a Free Life. We are now able to say that the rational life is a *free* life determined, not by our passions and opinions, but by the activity of our essential being which is complete, unclouded, and unhampered union of our minds with truth. The man whose views and whose actions are determined only by reason, that is, by himself, hates no man, "is angry with no man, envies no man, is indignant with no man, despises no man, and least of all is proud." It is "ever first in his thoughts that all things follow from the necessity of the divine nature; so that whatsoever he deems to be hurtful and evil, and whatsoever accordingly seems to him impious, horrible, unjust and base, assumes that appearance owing to his own disordered, fragmentary and confused view of the universe. Wherefore he strives before all things to conceive things as they really are, and to remove the hindrances to true knowledge, such as are hatred, anger, envy, derision, pride and similar emotions. . . . Thus he endeavors . . . as far as in him lies, to do good and to go on his way rejoicing."

XVIII. LIBERATION FROM HUMAN BONDAGE

Control of the Passions. We now know how the good man should live, and what the obstacles to living the good life are. These obstacles are the passions or "emotions contrary to our nature" with which we are assailed by the external world, and which impair our "power of arranging and associating the modifications of our body according to the intellectual order." We have now to ask whether it is possible for us to overcome the "emotions contrary to our nature," or whether the good life must remain forever a mere counsel of perfection.

Plainly, the passions are more difficult to deal with than simple intellectual error. The latter can be dissipated by recognizing the confused and inadequate nature of an idea, by distinguishing its constituent elements whose confusion makes it erroneous, and by assigning those elements to their proper physical correlates and thus to their proper place in the necessary order and connection of ideas. But the passions cannot be overcome merely by understanding them. To be sure, they can be understood, like any other modification of our body, and "an emotion, which is a passion, ceases to be a passion as soon as we form a clear and distinct idea thereof." For to understand a passion is to remove it from us by seeing that it is not part of us

and does not originate in us, but is a modification of our real essence in a way contrary to our nature.

Nevertheless, the real understanding of a passion, in such wise that it is overcome and removed, necessitates more than an intellectual apprehension of its character and causes. We may have a knowledge of good and evil and know that we are doing wrong, without being impelled thereby to mend our ways. We may approve the better course but follow the worse. If we are to follow as well as to approve the better course, we must *prefer* it. We must *desire* and *will* the good, must *hate* and *shun* the bad. In Spinoza's own words, "a true knowledge of good and evil cannot check any emotion by virtue of being true, but only in so far as it is considered as an emotion." The point in question thus becomes that of determining whether in the nature of things it is possible to invest the knowledge of good and evil with sufficient emotion in favor of the good to make it efficacious.

Love of Knowledge Strongest of All Loves. Spinoza believes both that such knowledge is in the nature of things necessarily accompanied by an emotion that makes it efficacious, and that he can prove mathematically and mechanically that this is the case. Granted that "any emotion can only be controlled or destroyed by another contrary thereto, and with more power for controlling emotion," the *desire* to know and the emotion attending the acquisition of knowledge and the application of it to our daily lives, are naturally and inevitably the strongest desire and the most powerful emotion with which a human being is endowed. For an idea is vivid and the emotions it arouses are correspondingly strong in proportion to the *number* of ideas associated with it, and to the *degree* in which these ideas are *present* experiences rather than memories or anticipations and are felt to be *necessary* rather than merely possible. Now, an idea that is *understood* is in complete possession of all these qualifications. It is seen in its proper relation to *all* the other ideas that fall within the scope of the divine intellect, and as a *necessary* expression of the nature of the Real and as part of a whole *present* in its entirety to the mind.

Hence, when a man understands and intuitively feels, he is modified not by some portion of Reality confusedly experienced and inadequately represented, but by the whole of Reality adequately represented. But an adequate idea of the whole must necessarily modify man more profoundly than does an inadequate idea of the part. Hence the emotion and the driving power connected with understanding and intuiting will be in themselves greater than the passions or impulses arising from partial and confused modification by any part or combination

of parts not understood. We conclude, therefore, that since the desire to understand and to know is the most profound and powerful reaction that any modification of our being can arouse in us, it can be successfully pitted against any other desires such modification may awaken.

XIX. THE INTELLECTUAL LOVE OF GOD

Our Love for God. This overpowering desire to know the nature of the Real, which is the one human desire that cannot be indulged to excess, and this disinterested love of such knowledge for its own sake, which is the one love than which no man hath greater, are synonymous for Spinoza with the love of God, and their satisfaction means human salvation. "The more we understand things, the more do we understand God," and the more we understand the more we love him. "This love towards God cannot be stained by the emotion of envy or jealousy: contrariwise, it is the more fostered in proportion as we conceive a great number of men to be joined to God by the same bond of love." It is of the nature of reason to desire to share its knowledge and its vision with others. Nor can anything separate us from the love of God. "No one can hate God" or help loving him, since for a man to hate or even to be indifferent to knowing the true nature of the Reality of which he is a part would be self-contradictory. The love of God is also completely disinterested, without thought of favor or expectation that God will love man in return. For to ask love from God would be to desire that he should not be the infinite and eternal Reality equally expressed in all things, but a private and personal being like ourselves. But so to conceive God would balk our essential desire to unite our minds with Reality, and would bring pain and frustration instead of joy and peace.

At this point Spinoza reiterates the assertion, already made in discussing the infinite intellect, that the Real is impersonal in character. "God is without passions, neither is he affected by any emotion of pleasure or pain." Nor does he love or hate anyone, as a person loves or hates. He is all things, the truth about all things, and an infinite mind lost in the contemplation of that truth; in whose sight all space is here, all time is now, and the content of all space and of all time is neither good nor evil but equally existent, equally necessary, and therefore equally expressive of and participant in the nature and the perfection of the Real. At the same time, it is part of that nature and that perfection that the mind should love truth, and that the vision of the truth should be the most interesting, the most exciting, the most

desirable, and the most lovable of all things. As Spinoza puts it, "God loves himself with an infinite intellectual love," and our love of him, and our union with him in the vision of all things "under the aspect of eternity," may be fitly described as "part of the infinite love wherewith God loves himself."

The Love of God Not Antagonistic to a Love of the World. Our love of God, however, and our union with him are in no way anti-physical and ascetic. They create no dualistic opposition between the soul and the body, and, indeed, not only are compatible with, but encourage and are fed by our enjoyment of the good things the world has to offer and by our participation in worldly affairs. The wider and more varied and rich our experience, the more we understand, and, as we have just seen, the more we understand, the better we know what God is like. And "he who possesses a body capable of the greatest number of activities possesses a mind whereof the greater part is eternal." The attainment of the beatific vision and the consummation of the intellectual love of God do not disembody us. On the contrary, they enlarge our body through an ever-widening and deepening understanding of its modifications and relations, till it becomes, as it were, the whole order and connection of the modifications of the Attribute of Extension which constitute the body of God.

XX. IMMORTALITY

Nature of Immortality. Needless to say, there is no such thing as personal immortality in Spinoza's system. "The mind can only imagine anything or remember what is past, while the body endures," and the whole range of experience connected with personal existence disappears with the body. *My* mind, the localized point of view that makes me *me*, is centered in and radiates from one particular modification of the Real, which is surrounded by other bodies and marked off from them. It, therefore, ends when the physical circumstances come to an end that support it and permit within it the distinction between itself and other things.

At the same time, though I myself, body and mind, have a beginning and an end in birth and death, nothing can destroy the fact of my existence. Nothing can remove *me*, as a distinct person, born at a certain time, living a certain life, and dying at a certain date, from the nature of the Real. From all eternity I am part of history, one event in the infinite order and connection of events, which nothing can displace or replace, and to all eternity I shall so remain.

If, then, I view myself "under the aspect of eternity" and contemplate myself simply as part of the truth about the world, I lift myself, body and soul, and every tiniest incident of my life, clear of time altogether, and see myself as an eternal fact forever present in the Real. In this sense I am immortal. But this immortality is not a *quantity* of existence. The vision that confers it does not add one instant to my ephemeral duration in time. It does not defer or abolish my death. It does not give me any power to go on existing after my allotted duration on earth is over. That duration is all there is to *me*. But even so, it is time enough for me to transcend time and to invest my brief life, while it lasts, with the *quality* of eternity. Here and now, on earth, in this body, for the span of its duration in time as a mode of the Real, this corruptible may put on incorruptibility, this mortal may put on immortality, if only it will fill mind and heart with deathless truth and good.

Deathlessness of the Mind. But there is also something more to immortality. The kind of immortality we have been describing is shared with all other things. To me, viewing existence "under the aspect of eternity," not only my mind but my body and all other physical events appear as modifications of God's being that nothing can alter or erase, and that therefore are timeless and deathless. "In God there is necessarily an idea which expresses the essence of this or that body under the form of eternity." But, though the majesty of the Attributes of Thought and Extension is co-eternal, their glory is not quite co-equal. The order and connection of physical events, to be sure, is no less timeless in God than the order of ideas. Both are equally objects of intuitive knowledge, and both are equally invested with the deathlessness of truth. To the mind alone, however, belongs the power of *perceiving* their eternity. In short, the mind is not a merely contemplated object, as the body is. It is also an *activity* of contemplation. And this activity, being essentially contemplation under the aspect of eternity, "depends on the mind as its formal cause, in so far as the mind itself is eternal." It is deathless, and therefore something to which the death of the body, momentarily correlated with it, cannot put an end.

"The human mind," then, "cannot be absolutely destroyed with the body, but there remains of it something which is eternal." But the "something which is eternal" and survives the death of the body is precisely the *impersonal* activity of the mind, which, even while we are alive, extinguishes as far as possible the *personal self-consciousness*

from which we suffer because of the correlation of human thinking with a particular body surrounded and modified by other bodies.

Morality and Immortality. Incidentally, Spinoza rejects the argument that, were it not for belief in personal immortality and hope of heavenly reward for virtue and fear of hell-fire awaiting the wicked, mankind would go to the dogs. That may be, he says; but, if such is the case, it is a slur upon true piety and religion and a founding of morality upon man's passions and inadequate and confused ideas rather than upon his rational nature and his acquaintance with the truth. To say that the man who does not believe in personal immortality has no incentive to right living is "not less absurd" than to suppose that "because he does not believe that he can by wholesome food sustain his body forever," he "should wish to cram himself with poisons and deadly fare"; or that "because he sees that the mind is not eternal or immortal, he should prefer to be out of his mind altogether and to live without the use of reason; these ideas are so absurd as to be scarcely worth refuting." Blessedness in this world or the next "is not the reward of virtue, but virtue itself." Salvation is not a heavenly crown that awaits in the future those who have controlled their lusts. It is a way of living here and now which automatically frees us from them.

XXI. SALVATION

The Union of the Mind with Nature. We come at last to the propositions in which Spinoza proclaims the saving power of the "something which is eternal" in our thinking, and of the vision "under the aspect of eternity" to which it elevates the mind. Their gist repeats and sums up much that we know already. The alpha and omega of our redemption lie in the statement that "our mind, in so far as it knows itself and the body under the form of eternity, has to that extent necessarily a knowledge of God, and knows that it is in God and is conceived through God." That this "knowledge of the union existing between the mind and the whole of nature" is the true and eternal good for which our whole being is athirst and in which we find our peace is now plain beyond doubt. All temporal loves and pleasures are a yearning for an object not as yet possessed and a passage towards a perfection still unattained. But the intellectual love of God is not a pursuit, but a possession and a consummation, and the felicity or "blessedness" that attends it must consist "in the mind being endowed with perfection itself."

Our Love of God Indestructible. To the indulgence of this love there are no stumbling-blocks save the misunderstanding of passion and evil. "There is nothing in nature which is contrary to this intellectual love, or which can take it away." No catastrophe, however great, can befall us which cannot be understood, and which, when seen under the aspect of eternity, does not take its place in the necessary order and connection of events as one of the infinity of co-equal witnesses to the rational character of the Real. So understood and so seen, it puts off the bitterness wherewith it affects the finite and passion-bound, personal and self-centered part of the mind which clings so stubbornly to its particular place, and time, and body, and makes them the all-important centers about which the other modifications of God revolve, and in relation to which their perfection and his are judged. The eternal part of the mind, whose essential activity has no center and is bound up with the interests and the fortunes of no one modification of the Real more than another, must rejoice equally in comprehending whatsoever comes to pass. Hence it will acquiesce in suffering and misfortune, not sullenly and hopelessly, but as evils necessarily to be endured. It will acquiesce in them joyfully as manifestations of the higher necessity and perfection to which it is attuned, towards which its love is directed, and from which it can only be separated by ignorance and failure to understand. Nothing, then, can occur in God's infinite and eternal essence that does not the more inflame our love of him.

Final Freedom and "Blessedness." Therefore, from him who loves God and unites his mind with the vision of God's infinite and eternal nature, all that harasses finite human life falls away—all hatred, all discontent, all frustration, and all fear. Even death, the last enemy, is trampled under foot, since to understand death, to see that it is a natural event necessarily implied in the essence of the Real and that its occurrence can rob us of nothing that a rational being should fear to lose, is to take away its sting. The power of the mind to achieve the vision under the aspect of eternity and to acquiesce in the destruction of the body is its power to attain "to being of such a nature that the part thereof which we have shown to perish with the body should be of little importance when compared with the part which endures."

So, at last, man attains redemption. From a passive he becomes an active being. From determination by the other modifications of Reality he passes to determination by the eternal part of himself, which is one with the whole of Reality. From bondage he escapes to freedom. Out of restlessness and unhappiness he creates blessedness and peace.

The winning of salvation is a long and arduous task, accomplished only by unremitting discipline of the spirit. Nevertheless, though "the way leading to it seems exceedingly hard, it may . . . be discovered. Needs must it be hard, since it is so seldom found. How would it be possible, if salvation were ready to our hand, and could without great labor be found, that it should be by almost all men neglected? But all things excellent are as difficult as they are rare." *Omnia praeclara tam difficilia quam rara sunt.*

Chapter VII

LEIBNITZ

I. LIFE

Early Years and Diplomatic Career. Among those of Spinoza's admirers who visited him, and who were shown the manuscripts locked in the drawer of his desk, was, we may remember, a young German, Gottfried Wilhelm Leibnitz, destined to be the third of the great Continental philosophers of the seventeenth century. Born in 1646, the son of the professor of moral philosophy at the University of Leipzig, he was a precocious child. His father died when he was six years old, and, before he was ten, he had been turned loose in his father's library, where he absorbed most of the Greek and Latin classics. He entered the university at fifteen, already interested in philosophy and critical of the Scholastic doctrine of substantial forms. Two years later, he was studying law in Jena and at Altdorf, where his brilliant attainments procured him the offer of a professorship, which he refused. We next hear of him in Nuremberg, where he joined the mystical brotherhood of the Rosicrucians, and where a friendship he struck up with one of the secretaries in the diplomatic service of the Prince Bishop of Mainz got him the job of helping revise and codify the law of that city. He so favorably impressed his princely and episcopal employer that at the age of twenty-four he was sent to Paris on a delicate diplomatic mission, which he himself had suggested. He was to try to convert Louis XIV's evil designs on Germany into a virtuous crusade against the Turks, by pointing out to the King that the mercantile power of Holland, with which France was then at war, could best be threatened by a campaign in the Near East and the conquest of Egypt.

The mission was not a success, since the King, who really did toy with the idea, eventually decided that Crusades may have been all very well in the time of St. Louis, but were no longer *à la mode*. However, Leibnitz fell in with all the scientific and literary lights of Paris at the time, among them Malebranche, Arnauld, the Cartesians, and Huyghens, with whom he studied the higher mathematics. One result

of all this intellectual ferment was the invention of the integral and the differential calculus, which was also worked out independently by Newton. His stop in Paris was interrupted by a brief visit to London, where, it seems, the ideas leading up to the calculus first entered his head.

Work in Hanover. The death of the Prince Bishop of Mainz in 1673 threw him out of a job. But he found immediate employment under the Duke of Brunswick, and soon moved to Hanover to become the librarian of the ducal library, which post he held for the next forty years. His position, however, was not confining and allowed him to roam over a great part of Europe in the fulfillment of his duties. Honors were showered on him thick and fast. He was offered the librarianship of the Vatican Library, but declined the necessary condition of conversion to Catholicism. He founded the Academy of Sciences at Berlin, and planned a similar Academy at St. Petersburg, and also at Vienna, where, however, the Jesuits put a spoke in his wheel. He was made a privy councilor by the Electors of Brandenburg and Hanover and by Peter the Great, and in Austria was created an imperial privy councilor and a baron of the Empire. Towards the end of his life, however, he fell into comparative obscurity, and died in 1716, a forgotten man.

Varied Interests and Writings. Leibnitz' interests were as varied as his activity was prodigious. Enchanted by his discoveries in mathematics and formal logic and the algebra of logic, and convinced that he had found in them a kind of philosopher's touchstone, he bubbled with ideas of the inventions to which he conceived they might lead in every conceivable field, not to speak of new notions in politics, government, law, and theology, most of which came to nothing. But he actually did invent a calculating machine which he put through its paces before the Royal Society in London. He also wrote at length on diplomacy, international law, ordinary law, politics, mathematics and physics. He proposed a universal language. He was interested in China, whose spirit of religious tolerance and conciliation, as reported by the Jesuit missionaries, appealed to him, and he advocated the compilation of a dictionary of Chinese, which he thought might be the mother of all languages. He defended the doctrine of the Trinity, and published a system of theology in which he sought to find a common basis for Catholicism and Protestantism. He devoted himself to gathering material for a history of the House of Brunswick. He fought with Newton and with Boyle, and wrote the *Theodicy* and the *New Essays* to refute Boyle's skepticism by proving on rational grounds that the

universe is rational and that God is good. His other more important philosophical works, composed in intervals of leisure between other occupations and with the conviction that he was reconciling all previous systems, are the *New System*, the *Monadology*, and the *Principles of Nature and of Grace*.

II. CRITICISM OF DESCARTES AND SPINOZA

Although Leibnitz admired Spinoza's philosophy, he quarreled with it for several reasons. In the first place, he could not accept the mechanical causation which played so prominent a role in both the Spinozistic and the Cartesian systems. Chains of so-called causes and effects merely describe the order in which things occur, but they do not explain why things are what they are or happen as they do. To say, as Spinoza does, that it is the nature of Reality to exhibit itself in the sequence of events that actually takes place, does not throw any light upon what that nature is. Furthermore, Spinoza did nothing towards solving the all-important problem of the relation between mind and body raised, and so unsatisfactorily treated, by Descartes. To say that they were two sides or aspects or attributes of one and the same thing was no answer, particularly if the thing was nothing but its sides, and if Reality, which was supposed to unite the two attributes, was, as Spinoza said, nothing more than the attributes it was supposed to weld together. In the Spinozistic system extension and thought remained as completely divorced as Descartes had left thinking substance and extended substance. Both philosophers had reduced the essence of matter to extension and nothing else, and the essence of mind to nothing but a thinking activity. In that case, there could be nothing incorporeal about the body, nothing unconscious about mind. But, Leibnitz thought, such a view runs contrary to observed fact. Apart from the propensity of the mind to insist that matter must be an extended *something*, matter possesses inertia in and of itself. This Descartes himself had admitted in his theory that matter tended to remain as it was until God introduced motion into it from the outside. But this inertia, this tendency to maintain the *status quo*, is not passivity on matter's part. It is activity, it is *force*. Hence matter is, at the very least, extension *plus* Force.

If now we look at thinking substance, what do we find? Its essence is not exhausted by being conscious. If it were, what would become of the mind when we are unconscious? Hence, Leibnitz concludes, there is more to thinking substance than just the thinking. It possesses

the power of persisting through states of more or less consciousness and of surviving lapses into unconsciousness. In other words, the mind, too, possesses a kind of inertia, a tendency to remain mind, even when unconscious. The mind, then, is a *force*, as well as a state of being conscious.

But if Force is present in both mind and matter, it is a least common denominator in them both. It is the substance of which thought and extension are the attributes. It is the Reality of which we are in search. If it is the Real, it is also ultimate. It fulfills the Spinozistic requirement of being "that which is in itself and is conceived in itself; in other words, that of which a conception can be formed independently of any other conception."

III. THE NATURE OF FORCE

Force and Monads. Force, then, is the pre-supposition and explanation of all things, the object of all our mathematical computations, and the object that seems to run, if you like, mechanically. It is a *metaphysical principle*.

How now are we to conceive Force in itself alone and independently of any other conception? Since it is that which remains in matter, over and above extension, it must be *unextended* and therefore *indivisible*, and therefore *simple*, and therefore *fundamental*. It is in all times and places what it is. It does not change or become. It cannot be conceived as created or destroyed, except perhaps by divine fiat. Therefore it is *eternal*.

Force, however, is not one. It cannot be one. It is a many, each one of which is equally possessed of all the prerogatives we have just been describing. This multiplicity of Forces is proved by an examination of both mind and matter. The spread-out, extended aspect of space means that each point in space *resists* being encroached upon and interpenetrated by the other points. Two bodies, as we say, cannot occupy the same space at the same time. If each point in space did not tend to hold its own, space would crumple up, collapse, contract, and vanish. Each point of space, then, may be regarded as a center of force.

Or again, take the mind. I am not you. I am I. I am unique. We are not only different minds, but we are minds absolutely shut off from one another. Each mind resists the encroachment and interpenetration of another mind, just as each point of space resists being identified with any other point. There are, then, as many Forces as there are *individuals*. But, according to the principles of the calculus, the

number of any units regarded as ultimate cannot fall short of infinity. Therefore, the number of unique individual Forces constituting Reality must be infinite.

These Forces, as we have seen, fulfill, severally and collectively, the specifications laid down for *substance*. We may also call them *units*, provided we do not confound them with mathematical units, which are divisible. To avoid this confusion, we may describe them as *points*. But here, too, we must be on our guard against thinking of them in terms of mathematical points, which have no real existence, but are purely and simply conceptual in nature. Perhaps, then, we may define them as *atoms*, but certainly not as physical atoms, which are not only divisible but extended. Nor can we use the term *qualitative* atoms, or ultimate units of qualitative rather than quantitative difference. For qualities are accidents of substance, whereas in these metaphysical ultimates there is no distinction between accident and essence. Each ultimate *is* what it is, and all that it is. It has no accidental properties or predicates. To avoid these possible confusions, let us adopt the term *Monad*.

With the concept of the Monad Leibnitz feels that he has overcome the Cartesian dualism of mind and body, refuted the psycho-physical parallelism and pantheism of Spinoza, destroyed atomistic materialism, reconciled the Scholastic nominalistic view that the individual alone is real with the realistic contention that universals also have real existence, and combined Plato and Aristotle. For the Monad, besides being the least common denominator of mind and matter, is individual and concrete but also possesses a Form and exemplifies an Idea, of which, being unique, it is in itself the only example and instance.

IV. THE DEDUCTION OF MATTER AND MIND FROM FORCE

- ✓ **Force and Consciousness.** Having thus inferred the existence of the Monads from an inspection of the nature of extension and of thought, Leibnitz proceeds to deduce consciousness and space from force as he has conceived it. Activity, or Force, makes each thing what it is and gives it its form or nature. But what do we mean by a thing's nature? We mean by our own nature or character the way in which we *represent* ourselves to ourselves. When, then, we talk of things as they are *in* themselves, we mean the thing as it would represent its nature to itself if it were conscious. Things *in* themselves are things *for* themselves. Again, we speak of the Monads as tending to persist in their

own being. But the idea of effort is drawn from our inner feeling of tension and striving, and the term is meaningless except as representing that feeling. Existence and Force, then, imply an inner life within the Monad, akin to consciousness. In ourselves we are viewing the Monad from within, as it is in and for itself.

But how about objects that we call inanimate and unconscious? The principle of continuity involved in the calculus now comes to Leibnitz' aid. This leads him to believe that there are no hops, skips, and jumps in nature, but rather a mincing progress by infinitesimal steps from zero to infinity. Man is not a miracle and an interference with the natural order. Hence the self-representative character of Force revealed in his consciousness and will is not an exception. Either there is no self-representation and no life anywhere—which is disproved by the existence and nature of man—or there is self-representation and life everywhere. Hence the so-called inanimate and lifeless world is merely a lesser degree of what we find in man, and absolute lifelessness and lack of consciousness are in the nature of a limit constantly approached, the lower down the scale we go, but never reached. The Monads that constitute the inanimate world are less endowed with perception and appetition than those which lie at the heart of living beings. They may be said to be in a sort of stupor, and their self-representations, or existence *for* themselves, may be called *perception*, or "little perceptions" (*petites perceptions*), in contradiction to the *apperception* of the higher Monads.

The Monads and Consciousness. The calculus also extricates Leibnitz from another difficulty. If the Monads are all unextended, indivisible, simple, fundamental, and eternal, how are we to distinguish one from another? Qualitatively, formally, and substantially, they are all alike, and, since they are unextended, they cannot even be distinguished from one another by saying that they occupy different points of space. They would seem to be indiscernible from one another, and there would seem to be no reason why they should occur in any one order rather than another. But, according to Leibnitz' own theory of the *identity of indiscernibles*, we should then have no ground for believing the Monads to be many and different, but should rather be obliged to regard them as one and identical. The calculus, however, enables us to avoid this contradiction by regarding the Monads as differing from one another in the *degree* to which they represent to themselves one and the same thing. Thus they can all be Forces and all possess the same characteristics, and yet be discernible from one another and therefore many and different.

Matter and the Monads. We pass now to the deduction of the physical world from the nature of Force. Extension cannot be the result of an interpenetration of the Monads or of any co-operation between them, since, as we have seen, they resist any encroachment upon their natures and conversely cannot encroach upon the natures of their fellows. Hence they cannot interest or influence one another. The physical world is rather the sign and symbol by which they represent to themselves their *exclusion* of one another. The prime characteristic of matter is the *impenetrability* of one part by another. This Leibnitz calls *materia prima*. But what do we mean by impenetrability? We mean that two bodies cannot occupy the same *space*. In other words, the Monad must represent to itself exclusion and impenetrability by representing bodies as side by side occupying different spaces. Extension, therefore, is a secondary characteristic of matter expressive of its essential impenetrability. We may call it *materia secunda*. Leibnitz has inverted the doctrine both of Descartes and Spinoza. Instead of extension being the essence of matter, body, impenetrability, and resistance, matter is the essence of extension.

✓ We may sum the situation up as follows. The metaphysical uniqueness and independence of each Monad, or at least of all the higher Monads, appear in two ways. Each Monad represents to itself that uniqueness *subjectively* in the feeling of individuality and separate personality. It also represents its independence to itself *objectively* in the apartness of its body from all other bodies. Space, which is the condition of such apartness, is not, then, an external thing. It is a form of the *inner* experience of each Monad. It is a mode of representing confusedly and on the level of *petites perceptions*, or purely physical existence, precisely the same fact of which self-consciousness, and personality, and a plurality of selves distinct from one another, are the representations on the level of mind.

V. THE CONSTITUTION OF REALITY

The nature of the Real is now clear. Reality is constituted by an infinite number of Monads representing to themselves, in degrees ranging from zero to infinity, the essential nature of things, or, as we may now say, the same universe. A zero degree of representation is non-existent, since its existence would be equivalent to non-existence. It is a limit which is more and more closely approached but never reached. Infinity, however, is reached and realized in the mind of God, the Monad of Monads, as Leibnitz calls him. The divine in-

tellect is a complete, absolutely clear, completely articulated, and wholly intelligible representation of the nature of all things, actual and possible. Below God, in an infinite series of Monads differing *infinitesimally* from one another, the content of the divine mind is reflected with almost imperceptible degrees of growing confusion, indistinctness, and intelligibility, in a descending hierarchy. This hierarchy lapses through man and the different grades of animal and vegetable life, and of complexity in inanimate substances, towards the absolute zero in which all representation, and with it all existence, would be extinguished, if it were ever reached. Though the gradations are continuous and without break or jump, they fall roughly under three heads. At the bottom of the scale lie the *petites perceptions* of the "swooning" Monads that constitute the physical world by representing to themselves their individuality as spatial apartness. Above them come the Monads possessed of simple feeling and memory whose activity is expressed in the consciousness of animals, and finally we rise to Monads in which reflection, self-consciousness and reasoning power are added to feeling and memory. These are the souls of men.

Since God is pure spirit, the divine Monad exists in isolation. But in human beings and animals, the soul Monad has Monads of a lower order clustering about it. In other words, men and animals have *bodies*. They are physical as well as conscious entities, and therefore represent their unique individualities in terms not only of mental but of bodily difference. My body is not your body, just as my conscious self is not your conscious self.

Furthermore, inorganic bodies—anything that holds together as a unit—also have a dominant Monad about which lesser Monads "cluster" and to which the aggregate owes its form and its cohesion. The self-representation of the dominant Monad, however, remains on the level of *petites perceptions*. The Monad sleeps but not quite so deeply as the others that cuddle about it. Hence the aggregate of the self-representations of the inorganic group is reflected in the consciousness of a higher Monad, like the human soul, as a single complex thing, rather than as a mere collection of unrelated units.

VI. PROOFS OF THE EXISTENCE OF GOD

Reason for Existence of Our Particular World. The reasons Leibnitz gives for the existence of God differ somewhat from the proofs with which we are already familiar. The cosmological argument, based on the necessity of a first cause, cannot be invoked in its usual form. For

Leibnitz, in criticizing Descartes and Spinoza, has already gone on record as saying that causality does not explain *why* things exist and behave as they do, but only describes *how* things act. Moreover, his account of the Monads shows no cause why they should not all be absolutely uncreated and eternal beings. Again, this is not the only possible world, and it is logically possible to conceive of the Monads as representing to themselves a different kind of universe from that which they actually do represent. There must, then, be some reason why the Monads behave as they do and not otherwise. This reason cannot be found in them, since, if they themselves could account for their behaving in this way rather than that, they would *necessarily* be what they are, and no other universe would be possible. Therefore, the explanation for their representing this particular universe rather than some other, must lie outside themselves. The requisite explanation is found in God.

Nature of "Windowless" Monads. Leibnitz' next proof rests on one of the most interesting and the most difficult points in his system. The Monads, we remember, are unique, and resist any encroachment upon or modification of their individuality by other Monads. No two of them can simultaneously occupy the same space, or, on the higher level of representation, be the same self. On the physical level, the Monads resist one another and hold one another off. On the mental level, their inner lives are absolutely private and incommunicable, except in so far as that part of their inner experience which they call the external world enables them by its behavior to represent indirectly, in terms of their own experience, what may be taking place within the other Monads.

The fact that each Monad is thus held *incommunicado* and is unable to interact or directly communicate with its fellows is freely admitted by Leibnitz. "The Monads," he tells us, "have no windows through which anything could come in or go out."¹ Each one is hermetically sealed up within itself. Still, the fact remains that a large portion of this hermetically sealed self-representation appears to reflect an external world with which we seem to ourselves to interact. And yet, if the consciousness of the Monad represents only itself to itself, how can the impression of an external world and of other selves arise? Why should I ever think that there is a universe outside me, of which I am a part? At this point, God is invoked to explain the principle of *pre-established harmony*.

¹ All quotations from Leibnitz are from Latta's translation.

The Pre-established Harmony and God. God, he tells us, has so arranged it that when certain changes and developments take place within one Monad, appropriate changes will take place in the inner experiences of the other Monads, representing and referring to these developments and giving to the other Monads the feeling that they are observing something going on in a world external to themselves. Leibnitz uses the illustration of two clocks keeping perfect time with one another, not because the mechanism of the one is geared into that of the other so that they interact; or because God is constantly setting the one clock by the other, as the Occasionalists taught; but because they have been so constructed and wound up and set going, once and for all, in the beginning, as to be always synchronous. Such clocks, without interaction and without intervention from the outside, will always tick simultaneously, strike simultaneously, and register the same second, minute, and hour simultaneously.

It follows that God must exist, not only to explain why the clocks are of the make they are rather than of some other, but to account for their being so perfectly timed that they appear to interact.

Had the technique of moving pictures been invented in Leibnitz' time he might have found in them another analogy for illustrating *pre-established* harmony. He might have likened the Monads to an infinite number of individuals hermetically sealed, each in a separate room outfitted with a projector and a screen, before whose eyes one and the same picture representing the doings of all the individuals was being shown. The films would be so "cut" and the projectors so synchronized that when the occupant of any one room did anything, what he was doing would be simultaneously thrown on the screens in all the other rooms.

Furthermore, if we imagined the screens to differ infinitesimally in size from an infinitesimal point to infinite bigness, the picture would be presented with an infinite number of degrees of clearness and completeness, ranging from an infinitesimal blur and flicker of light, in the case of the "swooning" physical Monads, to the completely inclusive, clear and distinct showing, from which no detail, however minute, was omitted, that takes place in the divine Monad.

VII. CREATION BY "FULGURATION"

The divine Monad, however, is responsible not only for the *pre-established* harmony and synchronization of the behavior and experiences of the other Monads but for their existence as well. In dealing

with the question of their creation Leibnitz found himself in a quandary. Considerations inspired by the calculus demanded that the "created" Monads should differ from God not in kind but in degree only, and hence should be really consubstantial with him and distinguished from him only in point of possessing a lesser *quantity* of the same substance. In that case their creation would be in the nature of a procession or emanation from God. But, on the other hand, the orthodox Christian doctrine, which Leibnitz had no desire to challenge, was that God created the universe out of nothing by fiat, and that the nature of the created differed from the nature of the Creator not only in degree but in kind as well.

Confronted with this difficulty, Leibnitz tried to reconcile the opposing points of view. He needed a term that would not too much connote an emanation theory of the origin of the Monads and range him along with Eriugena and Bruno, who taught that the created was consubstantial with the Creator. On the other hand, this term must somehow avoid the defiance of the calculus implied in creation *ex nihilo*. Such a term Leibnitz thought he had found in "fulguration." The lesser Monads are "fulgurated," or sparked and struck off, by and from the divine Monad. A process of "fulguration" might seem to hover somewhere half-way between emanation and creation by fiat, and to make the lesser Monads sufficiently consubstantial with God to allow of the application of the calculus, and yet not sufficiently so as to rate as an unorthodox method of deriving them from God.

VIII. BIRTH, DEATH, AND IMMORTALITY

At this point a few minor questions pop up, which it will be well to dispose of at once. How do things like birth, growth, death, and immortality fit into the picture? In principle there should be no real birth and no real death for any Monad, since all alike should be conceived as "fulgurated" once and for all, before all time, from the divine Monad, and as indestructible except by divine fiat. In that case, coming into and passing out of existence would be relative, and would signify simply increase or decrease in the degree of the Monad's self-representation. Also, needless to say, change of quality and place, growth and decay, and the like, will be internal processes, in which only the content and degree of each Monad's self-representation are altered in accordance with the metaphysical "clusterings" of lesser Monads, first about one dominant Monad, then about another. On the inorganic level the metaphysical shifting will appear as the transformation of

one physical object into another. In vegetable life the dominant Monad will wake up sufficiently to represent the shifting as a process of organic growth and decay. In animal life it will be aroused to the point of representing these changes as alternations in its ~~own~~ state of consciousness, and to becoming wider and wider awake as its body grows. In the same way, when a living being grows old and dies, the cluster of sleeping Monads that forms its body is gradually dispersed, and as gradually the dominating Monad, to whose superior degree of self-representation the cluster owes its organic unity, relapses to the sub-conscious level.

Leibnitz had, however, to except man from this general rule, both at the beginning and at the end of his earthly career. To conform to Christian teaching he had to conceive human soul-Monads as specially created, or "fulgurated," at the generation of each human individual, and not as pre-existing before birth. To ensure the personal immortality as well as the indestructibility of the human soul he could not permit her to lapse into a sub-human and sub-conscious degree of self-representation when the inferior body-Monads were dispersed by death. Therefore, he held that God detached her intact from her earthly body when it was destroyed, and preserved her throughout everlasting time in the fullness of her self-conscious, personal, rational, and moral degree of self-representation.

IX. ALL IS FOR THE BEST IN THE BEST OF ALL POSSIBLE WORLDS

Our Particular Universe Best. One question, however, still hung fire. Why did God choose to create or "fulgurate" this particular universe instead of some one of the other possible worlds conceived by his mind and equally capable of enactment? God, Leibnitz replies, is good. Therefore he chose the *best* of all possible worlds. However, in choosing he could not flout the law of self-contradiction. He could not pick all the best things out of all possible universes and run them together and make a world out of them. For the universe to be logical and consistent, he could only weave together things that logically could be realized together without contradiction and combined into a single rational whole. The best possible world, therefore, is limited by what Leibnitz calls the *compossibility* of its elements. Of course, there are many arrangements of compossible elements, but this is the combination in which "is obtained as great possible variety as possible, along with the greatest possible order," and thus "as much perfection as

possible." We may, therefore, come to the conclusion that all is for the best in the best of possible worlds.

The Problem of Evil. Leibnitz, however, realized that his optimism might be challenged unless he could satisfactorily dispose of numerous indications that all was not for the best, and explain why the best of all possible worlds seemed so inferior in quality. So it was that he undertook to solve the problem of evil. To facilitate his solution, he divided evil into three kinds, *metaphysical*, *physical* and *moral*. *Metaphysical* evil is the limitation and lesser degree of perfection necessarily imposed upon every created Monad by virtue of not being God. Logically, everything that is not God must be imperfect. Physical and moral evil are the ways in which the created Monads must represent to themselves their limited and imperfect character. Physical evil is essentially a sense of being constricted and hampered by the external world. Moral evil is essentially a sense of being limited by the weakness and the incapacity of our own selves. Suffering and sin then must necessarily exist, if there is to be any created universe or anything in existence except God.

This logical justification of evil Leibnitz supplements with a moral justification which proceeds along familiar lines. Evil in the part does not detract from the perfection of the whole. On the contrary, it contributes to it, as the shadows in the picture and the discords in a musical composition enhance the perfection of the work in question. More generally, the contrast of evil everywhere throws the good into higher and clearer relief. The afflictions and sufferings of the present moment are means to our greater perfection, and, as compared with it, are nothing. Pain and misfortune are a salutary punishment for sin, and, when they befall the righteous man, they test his character and afford him an opportunity for showing his strength.

Moral evil, being the twin of error and born with it, as Spinoza also insisted, from confused and inadequate thinking, may be dispelled. Even when we choose the worse cause, we choose it because of its momentarily satisfactory and therefore good quality. All acts are performed with a view to procuring some benefit. Pleasure accompanies the natural expansion of the Monad to a greater degree of self-representation. Pain is the sign of some interference with its development. Hence we are naturally inclined to pursue the pleasanter course, since we are self-determined to the good.

X. THE FREEDOM OF THE WILL

Freedom, for Leibnitz, lies in liberty to follow the determinations imposed upon us by our nature, not in ability to act without determination. In his essay *On the Ultimate Origin of Things* he states that God possesses this freedom to perfection, "for he acts from a principle of wisdom or perfection." The so-called freedom of indifference "springs from ignorance." It means not that the will acts without motivation, but that, because our ideas are confused, it hesitates between various courses of action. Our final decision, however, is always determined by what we think, correctly or incorrectly, to be for the best. "The wiser a man is, the more he is determined towards that which is most perfect."

However, the process of deliberating and thinking things over is not entirely a play of conscious thought, as Spinoza believed. Our attitudes and our decisions are in part the work of our unconscious mind, and it is largely their contribution to our choices that makes us vacillate and gives us the sense of not being determined by anything to choose the course we do. In Leibnitz' own words in *New Essays*, "It is the *petites perceptions* which determine us on many occasions without our thinking it, and which deceive people by the appearance of an *indifference of equilibrium*, as if, for instance, we were completely indifferent whether to turn to the right or to the left."

For the same reason we do not always choose and act *logically*, as beings actuated only by clear and adequate perceptions would. Probability is a sufficient motive for action. Moreover, the alternatives and choices thus presented make us moral beings, and our incentives to action appear not as determining causes but as ideals or ends which we may or may not pursue. Were we wholly dominated by reason, then we should be absolutely free. But in that case we should no longer be in a position to choose between good and evil, and should have transcended human morality and have become like God.

XI. NATURE AND GRACE

By virtue of possessing a moral and rational nature and a knowledge of eternal truth, man is a member not only of the natural order, but of the City of God, in which divine grace supplants natural law without, however, contradicting it. The sub-human Monads represent only the universe of created things, but the human Monads reflect

also the mind of the Creator. They represent him not merely as the cause of the universe but as a person, a law-giver, and a king, with whom they may have personal relations and whom they may love and be loved by. His commandments supplement the laws of nature. He rewards merit and justly punishes sin. From our personal communion with him we receive corroboration of the fact which logic has already demonstrated—that the universe is the best of all possible worlds and that in it all things are for the best.

Chapter VIII

LOCKE

I. REACTION AGAINST RATIONALISM

Periods of great constructive activity in philosophy are apt to be accompanied or followed by skeptical movements which doubt the ability of the human intellect to grasp the nature of Reality and challenge systems founded upon a belief in the infallibility of reason. At the very beginning of the history of European philosophy two centuries of construction in Ionia and Magna Graecia were called into question by the destructive criticism of the Sophists, and the re-building of Plato and Aristotle was accomplished in the face of the skepticism of the Cynics and the Cyrenaics. A little later, Stoicism, Epicureanism, and Neo-Platonism developed and consolidated their respective positions under continuous bombardment by Pyrrho, Arcesilaus, Carneades, Aenesidemus, and Sextus Empiricus. Again, even the crystallization of Christian dogma, backed though it was by revelation, was fractured here and there with doubts, and the faith of the Middle Ages was followed by the free thought of the Renaissance.

The Renaissance, however, challenged faith in revelation, only to oppose to it faith in the power of the unaided reason to reach and grasp the truth, and this faith inspired the systems we have just been considering. Bacon, Hobbes, Descartes, Spinoza, and Leibnitz were all certain that the Real was constructed according to mathematical and logical principles, and that the human mind, by strict adhesion to the scientific method and obedience to the laws of mathematics and logic, could reason out its nature. The objections that they urged against the Scholastics and the ancients were *rational* objections, and their defense of their own systems was a *rational* defense. But just as in the past this assumption of the infallibility of reason had been repeatedly questioned, so once more it was to be called to account. The point was again to be raised whether the very nature of the human understanding and the conditions under which it operated were not such as to render it an instrument of limited powers and of doubtful

efficacy so far as the discovery of the nature of Reality was concerned. Foremost in this skeptical movement was the Englishman, John Locke.

II. LIFE

Education and Character. Locke was born in 1632, at Wrington, not far from Bristol, of a middle-class yeoman family. Educated, after attending a grammar school in Bristol, at Westminster School in London, he would not have had to budge very far or clamber very much, to attain, along with his schoolmates, what must have been the ambition of every high-spirited seventeen-year-old boy at the moment—some really good point of vantage for observing the decapitation of King Charles I. In 1652, he got a scholarship at Christ Church, Oxford. Little is known of his undergraduate days, but they were sufficiently satisfactory to get for him a tutorship at Christ Church after his graduation and later the post of lecturer in Greek and rhetoric.

Locke was a man of many interests. He was attracted at first to theology, but soon turned to medicine, and practiced for a while as assistant to an Oxford M.D. He was also drawn to physics and chemistry and to the study of religious and political problems, and, as early as 1666, was writing his *Essay Concerning Toleration*, in which he already exhibited the broad-mindedness and the tolerance which characterized him throughout his whole life. In it he condemned persecution, argued for civil and religious toleration, and advocated the reunion of the Church of England and the Nonconformist bodies on a basis large enough to include and satisfy all shades of opinion.

Political Career. In 1666 he received a diplomatic appointment as secretary to the British Ambassador at the Court of Brandenburg. Returning to London, he met by accident Lord Ashley, later Earl of Shaftesbury and the greatest political figure under Charles II. Upon him he made so favorable an impression that he was offered the post of tutor to Ashley's son. About the same time, he was also elected a Fellow of the Royal Society, which had been incorporated in 1662. In 1672 Shaftesbury was made Lord Chancellor, and Locke, who had become a confidential friend, was appointed Secretary to the Board of Trade, a post which he held for the next three years.

Always delicate, Locke suffered much from asthma, and, when a temporary eclipse of Shaftesbury's prestige involved a reverse of his own political fortunes, he seized the opportunity to spend four years on the Continent traveling for his health. Two of them he spent at

Montpellier in the south of France, and one in Paris. Meantime he was preparing his *Essay Concerning Human Understanding*.

In 1679 Shaftesbury returned to power, and Locke to England and to public life again, but not for long. The question of excluding from the succession the King's Catholic brother, James, Duke of York, afterwards James II, was being hotly debated, and pressure was brought to bear by Shaftesbury and others upon Charles II, to legitimize his illegitimate son, the Duke of Monmouth, and make him heir to the throne. Charles refused, and Shaftesbury, who still supported Monmouth, was accused of treason but acquitted. Monmouth was arrested, and Shaftesbury, again under accusation, had to flee to Holland. Locke followed him. Because of his connections with the Monmouth party he was deprived of his University post and stipend by order of Charles, and his extradition from Holland was later demanded by the British Government on the ground that he was plotting against James II, who had succeeded his brother in 1685. For a while he had to remain in concealment and live under an assumed name. His time he divided between Cleves, Rotterdam and Amsterdam. All the while he worked at the *Essay*.

With the deposition of James II and the accession of William and Mary in 1688, he returned again to England and to prominence in politics. He was offered, but refused, the ambassadorship at Brandenburg, and was made Commissioner of Appeals. There followed a burst of publication—the *Letter Concerning Tolerance* in 1689, and a year later *Two Treatises on Government*, the *Essay Concerning Human Understanding*, and a *Second Letter for Toleration*.

After a couple of years in London he made his permanent home with some friends named Masham, who lived at Oates in Essex. Lady Masham was the daughter of Cudworth, the Cambridge Platonist, of whom we have already spoken. Here he rode and gardened, went on with his writing, and kept up with his circle of learned friends. Nor did his retirement in the country deprive him of political position. In 1696, he was appointed Commissioner of Trade and Plantations, but resigned it four years later, because of his failing health. In 1704 he died at Oates, at the age of seventy-two.

Political and Religious Views. Up to the last, however, Locke's literary activity was unremitting. The ideas that he had advanced both in his treatises on *Tolerance* and *Government* and in the *Essay* were controversial and shocking to many people, and he was kept on the *qui vive* defending his views from attack. Indeed, the great *Essay* was condemned by the authorities at Oxford for its skepticism. The letters

on *Tolerance*, which expounded the position of the so-called “Latitudinarians,” who denied the authority of the Church, the Fathers, and the Councils and demanded that the Bible be interpreted in the light of reason, naturally raised the ire of all those who bowed before ecclesiastical authority or insisted on taking the Bible literally as interpreted by their particular sect. So, too, the *Treatises on Government* argued at length against the divine right of kings to rule independently of the consent of the governed, and, while accepting much of Hobbes’ political theory, advocated constitutional government, and insisted that it was not only the right but the duty of the subject to rebel and depose a sovereign who defied the will of the people as expressed in Acts of Parliament. Locke also advocated a frequent revision of the contract upon which government rests so as to bring it into accord with the new needs and circumstances of the times. In the *Treatises*, again, he advances such interesting economic views as the worthlessness of gold and silver coinage, except as convenient medium for the exchange of true wealth, which lies in the products of labor.

III. “INNATE” IDEAS

No Innate Ideas. As a champion of freedom of thought and speech on all subjects within the widest possible limits, Locke found himself obliged by his philosophic meditations to include among those limits certain bounds to thinking imposed by no external censorship, but by the very nature of thinking itself. Granted that a man were permitted by Church and State and all other restrictive forces to think as he pleased and to say what he thought, to what extent would the censorship exercised by the peculiarities of his mind permit him to grasp and to describe the true nature of the universe? In the *Essay Concerning Human Understanding* Locke sets himself to answer this question by inquiring critically into the powers and limitations of the human mind.

His first doubts regarding the unlimited powers of reason arise in connection with the Platonic theory that the mind comes into the world already in possession of certain innate truths—a theory, as we have seen, handed on to medieval thought by Augustine, and accepted by Descartes, Spinoza, and Leibnitz. There are, says Locke, no such things as innate moral, or mathematical, or logical principles, already fortified by which the intellect begins its operation of thinking about the world. On the contrary, we are born with perfectly blank intellects. At birth the mind is a *tabula rasa*, an absolutely blank sheet of

paper with no watermarks of any sort in its texture, and all our ideas without exception are derived from the writing of experience upon its virgin surface. The first book of the *Essay* is devoted to refuting all arguments to the contrary.

All Ideas Derived from Experience. Locke begins by attacking the contention that all men agree in thinking in certain ways and in holding certain ideas, which, therefore, arising as they do in all human minds independently of the peculiarities of individual experience, must be inborn. To this Locke replies that, no such common agreement, or *consensus gentium*, can be shown to exist, and that, if it did exist, it would not prove innateness. Nor is there any way for distinguishing such truths as are innate from such as are learned.

Finally, the process of learning reverses the procedure we should expect if there were such things as innate principles. We recognize the truth of specific propositions before we accept general maxims. Many of the most necessary and valid propositions are not recognized until our attention is drawn to them, and then only if we have been so trained by previous education as to be able to understand them.

Turning now from the intellectual to the moral field, we find that there are no universal and self-evident moral principles. Moral standards, ideas of right and wrong, are relative to time, place, and circumstance, and have always to be explained and defended. We can always ask *why* this is right, or *why* this is wrong. Even conscience, that supposedly infallible guide to right conduct, is fickle and self-contradictory, imposing conflicting courses upon different individuals and upon the same individual at different times.

So, too, with religious beliefs. The central idea of all religions, the idea of God, is not innate. It is not universal, and where we find it, we find, not a single concept common to all who entertain it, but many conflicting and contradictory ideas.

Balancing up the sheet in the other column, we can discover no reason why all the ideas held to be innate should not be suggested by and derived from experience. Even such seemingly "necessary" truths as the logical principles of self-contradiction and identity do not have to be revealed. They may be learned from ordinary, everyday, empirical experience.

IV. THE DERIVATION OF IDEAS FROM EXPERIENCE

We must now show *how* the mind learns these ideas from experience. We come by all our ideas, Locke tells us, through *sensation* and

reflection. First we *perceive* and feel, then think about what we feel and perceive. Perception presents us with *simple qualities*, derived in some cases from a single, in others from a multiple, source. Color, for example, comes through the eye alone. A quality like solidity, however, is a combination of sensations of touch and resistance.

The perceptions thus written upon the blank sheet of the mind do not disappear immediately or all at once. Many of them fade slowly. They leave their mark. They are retained and *remembered*. This persistence enables the mind to *contemplate* them, to *discern* their similarities and differences, to *compare* and *distinguish* them, to *compose*, in imagination and fancy, their elements in arrangements not immediately given in sensation, and to *abstract* from them so-called general ideas. In his description of abstraction Locke follows Hobbes. The so-called general idea is a particular image of the class in question, taken as representative of all the other particulars belonging to that class. This power of abstraction, in Locke's opinion, is not possessed by the lower animals but by man alone.

The senses present us not only with *simple* ideas but with *complex* ideas compounded and combined in various ways, as in ordinary objects where various qualities are conjoined, or in collections where many objects are herded together. To these, through the power of imagination, the mind is able to add an infinity of new ideas. Nevertheless, in spite of their variety and number, all *complex* ideas fall under three heads. They suggest to us either "distinct *particular* things subsisting by themselves," as *substances*; or things considered as not subsisting by themselves, but "as dependencies on, or affections of, substances," like "triangle, gratitude, murder, etc.," which we will call *modes*; or *relations* of various sorts in which the ideas stand to one another.

V. NEGATIVE IDEAS. INFINITY AND POWER

Having described the processes by which the mind derives its ideas from experience, we are at last ready to analyze all our ideas into their constituent perceptual elements. But we are now faced with the fact, in itself an apparent refutation of Locke's refutation of innate ideas, that many of our ideas do not seem to be given in experience at all. For example, we never experience *infinity*, and yet we have an idea of infinity; we experience, not *substances* in themselves, but only their qualities, and yet we have the idea of substance. These are but two of a number of other ideas that transcend the field of sense-perception.

But how can ideas that are derived from experience refer to things that are not perceived?

Nature of Infinity. To answer this question, Locke analyzes these ideas, one by one. Let us begin with the idea of infinity, spatial and temporal. Our idea of space, says Locke, is derived from combined visual and tactual sensations, which give us the ideas of figure or shape, and place. Incidentally, he combats the Cartesian identification of space and matter, and maintains that there is nothing self-contradictory in the idea of a vacuum. Time, or duration, is an idea founded upon the flow of our inner experience. Time in the abstract is "the consideration of duration as set out by certain periods, and marked by certain measures or epochs, like the periodical reappearance of the sun and the moon."

Now, the succession of visual and tactual experiences by which we go on enlarging our perception of space, and the succession of states of consciousness that constitutes duration, are both such that we cannot conceive them as coming to a stop of themselves. The ability to go one step backward or forward in space and time carries with it the ability to go on indefinitely. Here, then, lies the secret of the idea of infinity. It is not a positive idea. It is a negative one. It expresses simply the inability of the mind to derive from its perceptions of extension, duration, and the process of counting, any idea that interferes with an indefinite continuance of those perceptions.

Nature of Power. *Power* is another idea that seems to have no sensible basis. We say that fire has the power to melt gold, or that the sun has the power to bleach wax. But we never perceive either the fire or the sun *doing* what we say they do. Neither do we perceive the gold or the wax being acted upon. All that we perceive is the gold melting or the wax turning from yellow to white when heat or light is present. Again, perception gives us no idea of the initiation of motion implied in the idea of power. No material object sets itself in motion. A billiard ball is set in motion by the cue or by the impact of another ball. It is acted upon, instead of active, and when it hits another ball, what we see is a *transference*, not a *production*, of motion. Production of power and initiation of motion are only perceived in ourselves, in our acts of volition. Our idea of power in the physical world is an unwarranted application of this perception to a field in which no such experience occurs. Therefore, it is a confused idea.

VI. POWER AND FREE-WILL

Power and Choice. Furthermore, Locke insists, such power as we *experience* in willing is not power to choose, but simply power to act according to our choice. This observation leads him to discuss at this point the freedom of the will. Freedom is not indetermination, for when confronted with alternatives, we cannot help *preferring*, and therefore wishing and willing, one course rather than another. Nevertheless, compulsion of this sort does not involve any question of freedom *vs.* necessity. Liberty consists in being able to do what we want and will to do; necessity in being hindered from putting our volition into execution. The so-called freedom of the will is, then, not freedom, or power, to *choose*, but freedom, or power, to *act* in accordance with our choice. Wills are not free; *men* are free.

Choice and Determination. Furthermore, there *must* be determining reasons for our preferring and willing what we do; we also can easily see how our will is determined to be what it is.

To push this point home, Locke analyzes the mechanism by which volition is determined. The first determining condition of volition is a feeling of uneasiness and desire—an impulse to remove and satisfy a want. If the uneasiness is not there, the *bare contemplation* of the satisfactions that allay it is not sufficient to determine the will and set us to work. Moreover, the greater the uneasiness, the more powerful the urge. Therefore, what we prefer and will must always be the removal of the most intense and pressing uneasiness, and the satisfaction of the most imperative desire, at the moment. But the simple absence of a good, however good we may regard it in theory, does not weigh against the immediate urge to remove present pain and satisfy immediate needs. Hence, we frequently do not will what is best for us in the long run, and, perceiving and approving the better course, prefer and follow the worse one.

However, all volition is aimed at happiness, and, if we sufficiently dwell on our true good, it may become an object of immediate desire, and its absence may create a major uneasiness and incite the will to pursue it. This is facilitated by the power the will has “to *suspend* the execution and satisfaction of any of its desires,” pending a closer consideration, examination, and weighing of the value of the desired objects.

Freedom and Suspension of Choice. It is this power “to suspend the prosecution of this or that desire” that is the source of all liberty; in

this "seems to consist that which is . . . improperly called *free-will*." Improperly called, Locke thinks, because suspension of choice is itself the inevitable result of the conflict of the uneasinesses in the mind, and the "indifference" of the will before the final choice is only valuable in so far as it permits that choice to be "the last result of a fair examination" and to be determined by a final judgment of good and evil emerging at the end of a series of reasoned and deliberate judgments, rather than by the impulse of the moment.

Both the Human and the Divine Will Self-Determined. On this point Locke is explicit. Power to choose undetermined by our "last judgment of good and evil" would be as great a misfortune and imperfection as lack of power to refrain from action till we have chosen. The more compelled we are to choose and pursue the greatest good, the freer we are. This is shown by the fact that "those superior beings above us, who enjoy perfect happiness, are more steadily determined in their choice of good than we; and yet we have no reason to think they are less happy, or less free, than we are." Nay more, "God himself *cannot* choose what is not good; the freedom of the Almighty hinders not his being determined by what is best."

Psychologically, too, determination of this sort is not attended with any feeling of compulsion. "The constant desire of happiness, and the constraint it puts upon us to act for it, nobody," Locke thinks, "accounts an abridgment of liberty, or at least an abridgment of liberty to be complained of. God Almighty himself is under the necessity of being happy; and the more any intelligent being is so, the nearer is its approach to infinite perfection and happiness."

VII. SUBSTANCE AND CAUSATION

Substance. Another idea, constantly in our minds but apparently lacking any foundation in sense-perception, is the idea of *substance*. We never see or feel a substance. All that we experience is a group of qualities. How, then, is the notion of substance derived from sensation? In attacking this question we notice at once that many of a substance's qualities are not believed to be inherent in the substance itself. We recognize that they are effects produced by it in us. For example, color, sound, taste, smell, tactual qualities and the like are, as we say, subjective, and cannot be said to exist in the external world. The various ways in which the object affects *us*, Locke calls *secondary qualities*. Nevertheless, in a sense the secondary qualities are not merely in our minds. They are in the perceived object as *powers* possessed

by the object of affecting us as it does. "Yellowness is not actually in gold," says Locke, "but is a power in gold to produce that idea in us by our eyes."

Certain of its perceived qualities, however, Locke conceives as belonging to the object itself, and as inseparable from it. Things-in-themselves are solid, extended, possess shape, are in rest or motion and are many in number. These qualities, which inhere in objects and are there, whether or not we experience them, are called by Locke *primary qualities*. It is the primary qualities that affect us with the secondary qualities. Indeed, Locke intimates that were our senses ultra-microscopic in acuteness, the secondary qualities would be resolved into their primary constituents. Color, for example, would disappear, "and instead of it we should see an admirable texture of parts of a certain size and figure."

Nature of Substance. So far, then, the idea of substance is bound up with three sorts of ideas, *primary qualities*, *secondary qualities*, and *powers* to affect or be affected by other substances. If we add to it the ideas associated with a soul or spirit, or immaterial substance, which is just as easy to conceive as a material body, we see how complex the idea of substance really is. But there is even more to the idea than that. It indicates also "*something besides* the extension, figure, solidity, motion, thinking, or other observable ideas. . . ." And yet, if we ask what this *something besides* the qualities is, we find ourselves in the same case as the Indian "who, saying that the world was supported by a great elephant, was asked what the elephant rested on; to which his answer was—a great tortoise; but being again pressed to know what gave support to the broadback tortoise, replied—*something, he knew not what.*"

In a word, the idea of substance as *something besides* its qualities is, like the idea of infinity, not positive but negative. It stands for nothing except a particular collection of perceived qualities *plus* an inability to "*conceive how they should subsist alone nor one in another,*" which makes us "suppose them existing in and supported by some common subject." But of the nature of this supposed support we have no positive or clear or distinct idea whatsoever.

Closely allied to the ideas both of substance and of power is the idea of *cause and effect*, which conceives one event, simple or complex, as *producing* or *being produced* by another.

Nature of Causation. But whether causation be the *creation* of something new, which never existed before, or the *generation* of one thing by another, or the *making* of a thing by an external cause, as in

the case of manufacture, or the *alteration* of a thing, we have no positive idea of how the so-called cause produces the so-called effect. Once more we are dealing with a negative idea—an observation of sequence *plus* an ignorance of how the seemingly connected links are actually interwoven.

VIII. THE MEANING OF IDENTITY

Characteristics of Identity. In the idea of cause and effect we have passed from ideas of substances and modes into the field of relations. The most interesting of these is the relation of *identity*. The idea is highly complex, both in its various applications and in the ideas that go to constitute it. In the first place, identity involves the ideas of space and time. The *same* object cannot be in two places at the same time. By the same token, it excludes all other objects from the place it occupies. *Different* objects cannot occupy the same space. Again, the idea of identity excludes the idea of two beginnings for one and the same object, or of one beginning for different objects.

These considerations enable us to solve the old problem of the principle of individuation. Individuation, says Locke, is involved in the very nature of existence itself, "which determines a being of any sort to a particular time and place, incommunicable to two beings of the same kind." In other words, points of space are unique and cannot be confounded with one another. We can only pass *from* one *to* another. This takes time. Hence no one individual can be in two places and no two individuals can be in one place at the same time.

As we have said, the idea of identity is very diversely applied. We have *identity of substance*, which means that the *same* substance is continuous with itself in time and space. It does not skip intermediate points in passing from place to place, or intermediate instants in passing from moment to moment.

Besides identity of substance, we have *organic identity*, such as a plant or animal exhibits in its growth. Here there is a constant change of substance. Yet we speak of a changing body as the *same* body. Why? Because in this case identity means unbroken continuity of arrangement and of relation between the different parts of the body.

Identity of the Individual and of the Person. In what does a man's identity consist? Not, replies Locke, in the identity of his soul or personality, since in that case, supposing there is transmigration of souls, we should be obliged to call the successive reincarnations of one and the same soul the same *man*. But if we were certain "that the *soul* of

Heliogabalus were in one of his hogs," would we say that this "hog were a man or Heliogabalus"?

We are now faced with the interesting question of determining what *personal identity* is. Such identity, Locke tells us, is purely a matter of consciousness, and rests upon the continuity introduced into consciousness by memory. "In this alone consists personal identity, i.e., the sameness of a rational being; and as far as this consciousness can be extended backwards to any past action of thought, so far reaches the identity of that person; it is the same self now as it was then. . . ." Therefore, we might add, even supposing that there were reincarnation, the reborn soul, though the same thinking substance, would not even be the same *person* any longer, since in this incarnation she has forgotten her former lives.

Personal Identity Possible. A number of subsidiary points have now to be considered. Can this continuity of consciousness and memory be preserved, when the substance underlying it is changed? Locke replies that since the body can be mutilated and altered and even completely renewed without interfering with personal identity, continuity of consciousness is not dependent upon permanence of organic constitution. So, too, there is no reason why it should not be independent of changes in thinking substance, or the soul. Nay more, there is no certainty that one and the same consciousness and personal identity might not be "transferred from one thinking substance to another," in which case "it will be possible that two thinking substances may make but one person. For the same consciousness being preserved, whether in the same or different substances, the personal identity is preserved."

Suppose, however, "I wholly lose the memory of some parts of my life beyond a possibility of retrieving them . . . yet am I not the same person that did those actions, had those thoughts that I once was conscious of, though I have now forgot them?" No, Locke replies, you are the same *man*, but not the same *person*. One and the same man might be a number of different persons "if he had distinct incommunicable consciousness at different times." It is probable, Locke thinks, that personal consciousness "is annexed to and the affection of one individual immaterial substance." But we cannot be certain.

The Person Not the Man Morally Responsible. It is, Locke adds, with the *person* not the *man* that justice human and divine is concerned. Happiness and misery, reward and punishment are bound up with our consciousness, and only with external objects so far as they affect our consciousness. We do not hold a man responsible for what he does when not in his right mind, or punish him for it. And we

determine that for which he is responsible and accountable in so far as his consciousness "owns and imputes to itself past actions, just upon the same ground and for the same reason as it does the present." Indeed, at the Last Judgment, God's sentence, to be just, must be "justified by the consciousness all persons shall have, that *they themselves*, in what bodies soever they appear, or what substances soever their consciousness adheres to, are the *same* that committed those actions, and deserve that punishment for them."

It is now obvious that ideas like substance, power, cause and effect, infinity, identity, and the like are far from being clear and far from being adequate representations of the things to which they are supposed to refer. They are obscure and confused in themselves and are partial and incomplete pictures of their objects. Much of this confusion arises from the ambiguity of the *words* we use as symbols of our ideas, which only too often do not fit them exactly and suggest other ideas besides those of which they are the name.

IX. THE AMBIGUITY OF ABSTRACT, UNIVERSAL TERMS

The part *words* play in thinking is so great that Locke devotes the whole of the third book of the *Essay* to them. Most of them, he points out, are general terms or family names, signifying classes of things rather than particular objects. We are, therefore, confronted with the age-old problem of the status of universals or *essences*. Locke deals with this question by differentiating between *nominal* essences and *real* essences. The nominal essences of things, expressed by their common name, rest upon the experienced resemblances that cause objects to fall into different groups and to receive different appellations. But they are so vague and fluctuating that we cannot relate them even to hypothetical groups in nature. Nature produces innumerable particulars, freaks, monstrosities, ambiguities, and the like, to which it is well-nigh impossible for us to assign a class and give a specific name. Underlying these nominal essences, to be sure, there may indeed be real essences, or some objective, underlying similarity of constitution in various individuals which gives rise to their superficial resemblances and to our application to them of a common name. Such essences would stand for real groupings, independent of our experience, but, since they are unknown and purely hypothetical, they have no bearing upon knowledge.

Knowledge then must content itself with *nominal* essences, or "those *abstract* complex ideas to which we have annexed distinct general

names." But in so doing it must not forget that they rest, not upon *all* observed qualities, but upon a few of the more obvious ones. They are not exhaustive, and the more general the idea, the more incomplete and partial it is. They mean different things to different minds. And they are expressed by words, whose imperfections and abuses are notorious.

The first step towards clear understanding is to remedy these deficiencies in general ideas and abuses of words so far as we can. This we may do by meaning something when we speak, and by saying what we mean. We should use words in their ordinary signification and be careful to define what we signify by them. We should also illustrate what we mean by them. We should not vary the meaning we give to them, or, if we do, we should note and explain our change in usage.

X. KNOWLEDGE AND ITS LIMITATIONS

Nature of Knowledge. At last we ask ourselves, What is knowledge? Locke's answer is that it is "*the perception of the connection of and agreement, or disagreement and repugnancy, of any of our ideas.*" This perception of agreement or disagreement of ideas takes place in four fields. First, we perceive it with respect to their *identity* or *diversity*; second, in the field of their *relations*; third, regarding the *co-existence* and *necessary connection* of qualities in things; and fourth, touching the question of *real existence* of things.

These perceptions may be actual and immediate, or they may be habitual, by virtue of our power to remember. Memory preserves both immediate, intuited ideas and demonstrated ideas from which the successive steps of the demonstration have been dropped. The reliability of demonstrated ideas rests upon the fact that what has once been shown to be true holds good whenever the subject-matter recurs. All knowledge, then, rests upon primary intuitions which are known to be what they are. Their presence and nature are unescapable. In demonstrated ideas we perceive agreement and disagreement, not immediately, but through the intervention of other ideas, whose certainty we have successively experienced. And the idea finally demonstrated must seem as obvious and as immediately certain as the idea with which we started.

Finally, besides intuitive and demonstrated knowledge, we have what Locke calls "sensitive knowledge." We cannot help referring our experience to an external world.

Knowledge and Experience. We have now to ask how far we can trust our so-called knowledge. Only, replies Locke, in so far as it concerns itself with things experienced or demonstrated from experience. The application of this test shows that we can have absolute certainty throughout all our experience of the *identity* or *difference* of our ideas. We experience directly things as like or unlike one another. But the relations between things are so numerous and complex that both our intuitive and demonstrative knowledge goes only a little way. So, too, as regards co-existence and necessary connection, we can know *what* the qualities of an object are, but we cannot know *how, why, and by what* they are tied together. We can see things acting and being acted upon, causing others or being brought into being by others, but we have no knowledge of the *connection* between the so-called causes and their so-called effects, or of the method by which power is *transferred* from one object to another. We have no experience, and therefore no knowledge, of spirits or souls or of the real nature of the external world. We have not any absolute certainty that the external world exists, though experience insistently suggests the presence of a "something I know not what" behind the perceived qualities whose combination makes up an object.

Truth and Error. Still, may we not make valid inferences from this suggestion? To answer this question, we must first discuss what we mean by *truth* and *error*. Truth and error, Locke tells us, come into being when we begin to make *propositions* about things. The ideas conjoined by propositions are in themselves neither true nor false; they are just *there*. When, however, we conjoin them, and predicate one thing of another, we raise the question of truth or falsehood.

Universal Synthetic Propositions Untrustworthy. Then we find that the truth of a proposition consists in "*the joining or separating of signs, as the things signified by them do agree or disagree with one another,*" and that falsehood is the reverse. We can make true or false propositions about fanciful objects like chimeras or centaurs, but such propositions add nothing to knowledge, and may be left out of account.

Another difficulty now confronts us. The propositions that are useful are universal and synthetic propositions. We make general statements to the effect that certain ideas are everywhere and always conjoined, and that certain things are universally true of experience. What warrant have we for this assurance of "everywhere" and "always"? We have no warrant, Locke replies, "unless we know the precise bounds and extent of the species its terms stand for." Therefore it must be admitted that we can make no certain universal propositions

about substances as they really are. For their *real* essences are unknown. Nor can we make such propositions even about *nominal* essences, since, even in things as we experience them, we are unable to understand how and why their qualities hang together as they do. Hence we cannot say that these qualities *must* everywhere and always occur together.

We can, however, make certain universal propositions and have real knowledge where we can ourselves determine our definitions and meanings in the realm of fruitful propositions. Thus we can be certain of the truth of mathematical propositions. So, too, we can have real knowledge of moral laws and ideas, since they, too, are such that we can perceive how their elements hang together and involve one another.

The Existence of Our External World. Having at last set the limits to certainty and knowledge, so far as the nature of things is concerned, we return once more to the question of their existence. What can we certainly know to exist, except our perceptions and ideas? The insistent suggestion of our senses that perceptions are produced in us by external objects, cannot, as we have seen, be verified. However, though not so certain as intuition or the results of the deductions of our reason, it is nevertheless "an assurance that deserves the name of *knowledge*." To all practical intents and purposes, the suggestion of an outer world is sufficiently certain to enable me to trust it. But it gives us no inkling as to the nature of those objects, or even of their continuous existence in the past. We can, however, trust our memory and believe that just as in the past we did have certain experiences, so in the past objects giving rise to those sensations actually did exist. But "this knowledge also reaches no further than our senses have formerly assured."

Of the existence of finite spirits or souls, we have no certain knowledge. We can only take them on faith.

We conclude that we can make no universal propositions about concrete objects with absolute certainty. The only propositions regarding them that have the value of knowledge are particular propositions.

Certainty of One's Self. There is, however, one thing, besides my ideas, of whose existence I have immediate and intuitive certainty. That is myself. I am as sure of my own existence as I am of the pain I feel or of the doubts I entertain. Our own existence, he says, "we perceive so plainly and so certainly, that it neither needs or is capable of any proof."

We may now sum up the whole situation. "No existence of anything

without us, but only of God, can certainly be known further than our senses inform us."

XI. GOD AND IMMORTALITY

We have, Locke thinks, a *demonstrative* knowledge of the existence of God. The proof is as follows. I actually exist. Since something cannot come from nothing, I must be produced by something. This something cannot come from nothing. Hence what causes me must have always existed, and be eternal. It must also be the source of all power in the universe, and therefore most powerful. Again, I am a thinking being. Mind cannot have been produced out of nothing. Nor can it be an effect of matter, since matter is an unthinking substance, and it is as difficult to conceive thought arising from the unthinking as it is to conceive matter produced by nothing. Indeed, there is nothing in the concept of matter to account even for the existence of motion. For the same reason, matter *plus* motion cannot be conceived as giving rise to mind. Thinking, therefore, must be at least as eternal as matter, and the cause of my mind must be this eternal mind.

Still, may not this thinking Being "*also be material*"? The question, Locke answers, is really not important, since God, whether pure mind, or mind and body, in any case exists. Still, since attributing a body to God might encourage materialism, it is best to show the folly of such a supposition. As we have seen, thought cannot be conceived as arising from or located in matter. Taken severally or collectively, the particles of which matter is composed are not thinking beings. No one of them, and no organization of them, whether at rest or in motion, can ever produce anything but physical situations. Therefore, God's thinking has no material cause or ground. God is an immaterial being.

But may not matter be co-eternal with God and uncreated by him, as many philosophers have maintained? This Locke denies, but his argument against it is an act of faith. Creation of spirits and bodies out of nothing by God is something that exceeds our powers of comprehension. Nevertheless it is a fact.

Respecting the immortality of the soul, Locke is cautious. He accepts it as a matter of faith, but we have neither intuitive nor demonstrative knowledge of it. Indeed, the *pros* and *cons* of the question whether the soul is material or immaterial are so evenly balanced that, if a man weighs them, "the difficulty to conceive either will, whilst either alone is in his thoughts, still drive him to the contrary side."

In his *Reasonableness of Christianity* Locke argues that immortality cannot be inferred from the ideas of identity and personality, or regarded as part of the essence of the soul. It is an additional gift, granted us by God's grace. It may, therefore, be withheld, if it so pleases God, and perhaps it is denied to those who have not made themselves worthy of it by virtuous and Christian living here below.

XII. THE NATURE AND LIMITS OF DEMONSTRATION

Most Demonstration Only Probable. The last chapters of the last book of the *Essay* are devoted to a further consideration of demonstration, which Locke has invoked to prove the existence of God, but of whose character he has given no detailed discussion. First of all, we should note that much of our thinking is "wishful." We cannot, indeed, avoid seeing things upon which we have turned and to which we have opened our eyes, but we can turn and open them upon such experience as we please. Again, we may note that since absolute certainty is so scarce, we have to base a large part of our thinking and acting on *probability*, and to make use of judgments founded on a *presumed* agreement or disagreement between ideas, rather than of propositions grounded upon actual perception of this relation. Most of our judgments, therefore, have only partial and fallible validity. But there are laws of evidence, which set limits to probability and involve degrees of credibility. These we must now examine.

Presumption and probability, and the weighing of evidence, rest in the first place upon the conformity of the reported event with our experience and upon the credibility of the witnesses reporting it. Thus the more conformable an event is to our own experience, and the more universally it is testified to by other men, the greater its probability and the easier our assent to it. Conflict of testimony creates less probability in the event and more doubt in our minds. In evidence that counts we must include the testimony of history, remembering always the distortion that arises from handing down reports either by word of mouth or by copying.

Again, analogy is of great assistance in establishing the probable nature of the operations and processes in nature that escape experience. So, too, is experiment. Here again, the most probable analogies are those which agree most closely with experience. For example, by analogy we may argue from the continuous and orderly nature of the experienced world that the rest of the universe exhibits the same continuity and gradual ascent from the lower to the higher. Our faith in

miracles, however, must not be disturbed. Their contrariness to experience and consequent improbability are more than offset by the testimony of revelation.

Uselessness of Syllogistic Reasoning. The fact that so much of our thought and action is based upon probability leads Locke to point out how inevitable a great diversity of opinion on all subjects must be, and how necessary it is for us to be charitable and tolerant in dealing with such differences.

Turning now to the processes of reasoning which underlie demonstration, Locke expresses grave doubts as to the utility of the syllogism and of traditional logical methods in the acquisition of knowledge. Probabilities are not established, neither is knowledge enlarged by its use. The weaknesses of reason are due, not to a failure to cast its thinking in syllogistic mold, but to the restricted number of ideas with which it can deal, to the obscurity of many of the ideas we do possess, to the inability of the ordinary mind to perceive the connecting ideas immediately intuited by men of genius, to starting from false premises, and to the misuse of words. The most certain knowledge we have is prior to reasoning of any sort, and if, in the progress of demonstration from idea to idea, we stop long enough for each new link in the chain to become immediately and intuitively certain, we shall arrive at correct conclusions, syllogism or no syllogism.

Moreover, most of our knowledge is only probable, and upon the judgments and assents involved in such knowledge no amount of syllogizing could confer any additional certainty. Sound argument uses only "proofs drawn from any of the foundations of knowledge on probability."

Acceptability of Revelation. Probability must also govern our attitude towards matters of faith and so-called "revealed" truth. "Revealed" truth cannot have the same certainty as demonstrated or intuited truth, since certainty is bound up with direct experience. In no case can we accept a revelation "*if it be contradictory to our clear intuitive knowledge*. Because this would be to subvert the principles of all knowledge, evidence, and assent whatsoever; and there would be left no difference between truth and falsehood, no measures of credible and incredible in the world, if doubtful propositions shall take place before self-evident."

The objects of faith may be above reason in the sense of lying beyond the reach of our present experience, but they cannot be contrary to reason. Reason must always be followed, so far as it affords us certain knowledge. Revelation may indeed run counter to *probability*,

but, if we are to accept its improbabilities, they must still be such that, if they were experienced, they would prove intelligible. Finally, we should never accept revelation as a substitute for reasoning, when it is possible by the use of the unaided intellect to attain certainty. We should only take on faith what is incapable of being known at all, or what belongs among those things of which our knowledge at the best gives only probability.

The Influence of Wishful Thinking. People, however, are apt to believe what they want to believe. "They are sure because they are sure; and their persuasions are right because they are strong in them." What they believe "*is a revelation, because they firmly believe it; and they believe it because it is a revelation.*" And, "when once they are got into this way of immediate revelation, of illumination without search, and of certainty without proof and without examination, it is a hard matter to get them out of it." Supernatural light, however, does not extinguish the natural light of ordinary intelligence. God commands our assent to truth by making it reasonable. "*Reason must be our last judge and guide in everything.*"

As it is, reason has troubles enough of its own. It is prone to assent in its judgments to that which is not true and to fall into intellectual error. Since assent is grounded on likelihood and has probability as its proper object and motive, it is interesting to ask "*how men come to give their assents contrary to probability.*" The causes of error fall under four heads. In the first place, we often assent to propositions without examining even such evidence of their probability or improbability as lies close at hand. Or we misuse the evidence we have, for want of skill in weighing testimony. Or we are simply too lazy to examine it. Or, in examining it, we are swayed by other than rational considerations, as, for example, by principles that we have been taught by others to accept as true, received hypotheses, or established explanations, or individual ruling passions, prejudices, and preferences, and finally deference to authority of one sort or another. We refuse to be convinced by unwelcome views or to go on with any inquiry that seems to be leading to results damaging to our preconceived views, and we may decline to employ our faculties in the search of any truth. In this way we protect ourselves against the acquisition of unwelcome knowledge. But in the end truth will win out, since we have eventually to accept willy-nilly the views that have the greatest intellectual probability on their side.

Chapter IX

BERKELEY

I. LIFE

Childhood and Education. Locke, for all his skepticism, considered it so probable as to be practically certain that our perceptions of the external world referred to and were caused by material substances possessed in themselves of the primary qualities of "solidity, extension, figure, and mobility." Berkeley's skepticism regarded the existence of any such substances as not only undemonstrable, but impossible, and his main argument is concentrated upon demolishing the being of the material world.

Of Berkeley's ancestry and early life we know very little. He was born in 1685 in a farmhouse that constituted the only habitable portion of Dysert Castle, otherwise in ruins, near Thomaston, twelve miles from Kilkenny in Ireland. His father is said to have been a kinsman of Lord Berkeley of Stratton. He was a precocious and imaginative child, and was early haunted by a sense of the unreality of the material world. His education was received at Kilkenny School, the Eton of Ireland, where he studied classics and mathematics, and at Trinity College, Dublin, where his eccentricities and enthusiasms won him the distinction of being considered either the greatest genius or the greatest dunce in the College. There he came under the influence of Locke and the Cartesians. He was much interested in philosophy, and was already working his way towards the main principle of his system, which eventually burst suddenly upon him as a kind of revelation, in much the same way as the principles of analytic geometry suddenly occurred to Descartes.

In 1707, he was elected a tutor at Trinity, and two years later was ordained a deacon and then a priest in the Anglican Church. At this time, he also published his *Essay Towards a New Theory of Vision*, in which he attacked Locke's theory that primary qualities are objective, not subjective. This was followed almost immediately by the *Treatise Concerning the Principles of Human Knowledge*. Meantime

he had been promoted to the office of sub-lecturer and junior Dean, and in 1712 was made junior Greek lecturer.

Life in London and Abroad. The next year he went to London, where he was introduced by Swift, an old schoolmate, to his cousin, Lord Berkeley, by whom he was presented at the Court of Queen Anne. He was thus made free of London society, which at the time was brilliant and counted among its members Steele, Addison, Pope, Prior, and the great Deist, Clarke. He wrote essays in the *Guardian*, Steele's paper, attacking the free thinkers, and published the *Dialogues*.

The sojourn in London was followed by a journey to Italy, as secretary and chaplain to Peterborough, who had been on an embassy to the King Amodeus of Sicily. His trip was interrupted by the death of Anne and the recall of Peterborough, and he returned to England. A few years later, we find him abroad again as tutor to the son of the Bishop of Clogher. It is probable that he met Malebranche at this time, and there is a story that he hastened the philosopher's death. He visited Malebranche, so the story goes, when the latter was ill with pneumonia, and the violence of their dispute was so great, and Malebranche shouted so much, that the inflammation of the lungs was aggravated and resulted in death. A little later, Berkeley was once more in Italy, in Rome and Naples and Calabria.

The year 1720 saw his return to England, which he found in the throes of the panic induced by the bursting of the "South Sea Bubble"—a scheme for underwriting the national debt by exploiting the reputed riches of the South Seas. The shares went to £1000, the directors sold out, the stock collapsed, and many people were ruined. To this epoch belongs the essay *De Motu*, a study of power and causation. From England, Berkeley went back to Dublin as chaplain to the Duke of Grafton, where he was given the degree of D.D. by Trinity and appointed a Senior Lecturer and University Preacher. Shortly afterwards he was made a Dean and elected to the lectureship on Hebrew.

Life in Rhode Island. Also, he came into money. Swift had an ardent admirer in the famous Vanessa Vanborough, who had willed him all her fortune. Discovering his secret marriage with Stella, she revoked this will, and left half her property, a sum of about £4000, to Berkeley, and then conveniently died. Also, at this time he had a vision. He was much shocked and saddened by the state of English society and dreamt of one more perfect which might be founded in far-away America, then invested in the eyes of many visionaries with a halo of romance as the home of the noble and unspoiled savage, a

child of nature as yet uncorrupted by civilization. The Bermudas, at the moment, exercised a special fascination. They were to Europe what the Hesperides were to the Greeks. There, it seemed to Berkeley, a college might be founded with the double function of educating the clergy and converting the Indians. He set about soliciting subscriptions and obtained a charter from George I. These were difficult days for him. There was litigation over the Vanborough estate and much red tape in connection with the charter. Then, too, he was courting Anne Forster, a lady of a good English-Irish family.

At last all difficulties were smoothed out, and in September 1728 he set sail with his bride for Rhode Island, where he landed at Newport in January 1729. Rhode Island, since the days of Roger Williams, had been the asylum of the oppressed, and thither most of those had betaken themselves who could not get on with the Puritans of Massachusetts. Furthermore, the merchants and sea-captains of Newport had amassed considerable fortunes, and the combination of a liberal tradition with wealth had produced a gay and pleasantly worldly society, given to fox-hunting and other amenities of existence, and patterned somewhat after English country-life. Berkeley was hospitably received in Newport, and spent two years there, living first in town, and then in a country house called Whitehall—which is still standing—about three miles inland. Here his first child was born, and here he busied himself with his scheme for the Bermuda college and with writing the *Alciphron* dialogues. He also took a great interest in Yale College and carried on a philosophical correspondence with its President.

Elevation to a Bishopric and Death. Things, however, went badly with the Bermuda project. The Walpole ministry balked at contributing the £20,000 promised earlier by the state, and Berkeley abandoned all hope of realizing his dream. He went up to Boston with his family and took ship for England. The next two years he spent in London—from which death had taken Steele and Addison, and Ireland had reclaimed Swift. In 1734 he was made Bishop of Cloyne, an episcopal seat in County Cork, not far from Queenstown. Here he spent the next twenty years attending to his diocese—with one break only in his routine when in 1737 he went to Dublin to sit in the Irish House of Lords. He was much interested in the social condition of Ireland and in improving matters in his diocese. Liberal and kindly, he was only too glad to cooperate with the Roman Catholics. The literary fruit of this epoch was the *Siris*, the famous essay which, beginning with a disquisition on the medicinal virtues of tar-water, ends with

a discussion of the Trinity, after having dealt on the way with the vital principle, the nature of space and time, free-will and necessity, matter and form, the soul, and the nature of God.

Berkeley's eldest son was now ready to go to Oxford, and had matriculated at Christ Church. The family followed in order to be near him. For some time the Bishop had been in bad health and had suffered from gall-stones. At the end of the first year in England he died suddenly in January 1753.

II. THE DOUBLE PERCEPTION OF SPACE

The Perception of Distance. Berkeley seems to have been started on his skeptical path by Locke's own doubt, expressed in a passage in the *Essay*, as to whether a man born blind and acquainted with a globe and a cube only by touch, could, if his sight were suddenly given him, distinguish the globe from the cube by his eye, without again handling them. This doubt was raised in Locke's mind by a question put to him by his friend Molyneux, which suggested that our perception of shape and magnitude is double, and combines those qualities as they are given by touch and as they are given by sight. The same question perhaps had already occurred to Berkeley, but the hint thrown out by Locke helped crystallize his doubts as they appeared in the *Essay Towards a New Theory of Vision*.

In this work he concludes that not only shape and magnitude, but the distance and the relative situation of objects, are not perceived directly by the eye, but are judged only after visual have been associated with tactual sensations and with experiences of movement. That *distance* is not given by sight Berkeley argues, first, from the absence of any means within the eye itself for estimating the nearness or the remoteness of the sources of the rays of light that impinge upon it. Pictures are cast upon the retina in the flat, and contain no suggestions as to which of their features are nearer, which farther away. Nor can distance be judged by the degree of the convergence of the two eyes, since no one consciously computes the angle or is conscious of the lines of convergence. Even if he were, there would be no reason in the activity of vision itself for associating a sensation of less convergence with more distant objects, of greater convergence with objects closer at hand. Therefore, Berkeley insists, distance is perceived *mediately*, not immediately. It is *learned* through long association of objects of touch and experiences in reaching and walking, with objects of vision.

Magnitude and Situation. Coming now to *magnitude*, we find that the same considerations hold true. We have size as it is given to touch and size as it is given to the eye. These two sorts of sizes are quite different and often contradict each other. "Nor will it be found that great or small visible magnitude hath any necessary relation to great or small tangible magnitude—so that the one may certainly be inferred from the other."¹ Again, visual size differs with the distance of the object—remoteness or nearness. To overcome these discrepancies we invent standards of measurement in terms of tangible magnitude. But they are artificial and arbitrary.

Or take *situation*. Our perception of situation is excessively complex and curious. In the first place, since all images are inverted on the retina of the eye, external objects are given upside down. Again, visible and tangible situations differ and sometimes confuse each other. Only long association enables us to correlate visual with tactual and motor right and left, up and down, and the like. A man blind from birth, if suddenly given his sight, would have no idea of visible up and down, right and left.

The upshot of the whole matter is that "*the extension, figures, and motions perceived by sight are specifically distinct from the ideas of touch called by the same name; nor is there any such thing as one idea or kind of idea, common to both senses.*"

Primary and Secondary Qualities Equally Subjective. These conclusions seemed to Berkeley to knock the bottom out of Locke's distinction between primary and secondary qualities. For, if we say that objects actually possess in themselves solidity, extension, figure and mobility, we may properly be asked which sort of these qualities do they possess, tangible or visual?

Nay more, the so-called primary qualities are just as subjective, just as much effects produced on our senses, as are the so-called secondary qualities like color, taste, sound, temperature and the like. They are complexes of visual, tactual, and locomotor sensations. There is no more reason for believing that they are really in the external object than for believing that color and taste and smell are in it. Like the secondary qualities, they are effects produced by the object upon our minds. We are left, then, with an external world possessed of *no known qualities whatsoever*, since all qualities and properties, primary as well as secondary, are effects produced by that world upon the kind of sense-organs we have.

¹ All quotations are from Fraser's edition, Oxford, 1871.

III. THE IDEA OF MATTER

At the most, then, the term *matter* can signify no more than this unknown something, of which we can predicate neither size, nor shape, nor extension, nor motion, nor rest. But can it signify even that? In other words, can we so much as have an *idea* of matter as something more than the combination of sensible qualities we call an "object"?

Berkeley's approach to this question is made through his discussion of the nature and origin of abstract ideas set forth in the introduction to his *Treatise Concerning the Principles of Human Knowledge*. Here, again, Berkeley follows Locke and allies himself on the side of the "nominalists." *Things*, he tells us, are experienced as groups of qualities. Though the qualities are not *experienced* in isolation, we can isolate them for purposes of thought and consider them separately.

Moreover, the mind, in comparing the combinations of qualities it perceives, notes points of resemblances and common features. Thus the ideas of these qualities or combinations of qualities acquire a *general* reference and significance. The picture may be vague and ill-defined and without reference to any particular instance of the idea under consideration, but it is nevertheless particular, not universal, concrete, not abstract.

It is the particular image, taken as a sign or representation of everything falling within the class of objects under consideration, that constitutes the so-called *abstract idea*. Universals, then, are not names of real abstract natures, but of relations in which individuals stand to one another. So-called abstracting and generalizing does not lie in getting rid altogether of particularity and concreteness, but in making one particular concrete image or picture stand for a whole class of objects.

It follows that general terms or names do not signify one idea, as they are commonly and erroneously supposed to do, but a multitude of ideas. The name "horse," for instance, signifies a myriad different images of a horse called up in a myriad different minds by hearing the word. But the name equally signifies all these images, since it stands for certain aspects which they have in common.

Names, then, do not *limit* the ideas for which they stand. "There is no such thing as one precise and definite signification annexed to any general name, they all signifying indifferently a great number of particular ideas." They also arouse passions as well as evoke ideas, and

acquire halos of value which frequently do not illuminate their meaning. Hence the magic and the authority attributed by the Schoolmen to universals is quite absurd. Abstract and general terms in no wise enlarge our knowledge, except as convenient symbols for representing and communicating the images of particular things. They arise from experience and terminate in experience. Apart from their reference to sense-perception they have no meaning or use.

With these considerations in view, let us look once more at *matter*. What is in our mind when we have the idea of "matter" in general? The answer is obvious. We have nothing but the image of some vaguely extended, and resistant, particular object of indefinite shape and size, either moving or resting, faintly stained with color or hardness or softness or other "secondary" characteristics. The only difference between this image and the picture of any other "material" object is that we make it representative of all other experiences exhibiting the same "material" qualities. Matter, in a word, doesn't *mean* anything except complexes of sensations. Where, then, is Locke's "substance"? Where is the "something I know not what" underlying and supporting the combinations of qualities we call material things? Nowhere.

IV. THE DIALOGUES BETWEEN HYLAS AND PHILONOUS

Non-Existence of a Material Substratum. This position, reached by Berkeley in his youth, remained till the end the core of his system. We have now to follow him in the reiteration and elaboration of his main thesis, to which the *Dialogues* are devoted. In the first series of *Dialogues* Berkeley appears in the character of Philonous arguing with Hylas, a believer in the reality of Locke's substances. The first *Dialogue* covers familiar ground. The distinction between primary and secondary qualities is destroyed and all alike are agreed to be subjective and experiential in character. Hylas struggles a little against abandoning the notion of Sir Isaac Newton that there is an objective and absolute space, time, and motion existing independently of sensible extension, movement and duration; but he is soon convinced by Philonous' argument that such absolutes are merely abstractions from particular sensible instances. He is next dislodged from the idea of a *substratum*, to which he still clings. He is prodded with Locke's story of the elephant and the tortoise and with the impossibility of finding any final substratum except at the end of an infinite regress, and he is thrown into confusion by being asked to explain just how such a sub-

stratum, if it could be found, should be conceived as "supporting" its qualities.

Existence and Experience. The college bell is about to ring for prayers. As Hylas and Philonous part Philonous suggests that *no ideas can exist without the mind*. This thought so staggers Hylas that he is not sufficiently recovered from it to face Philonous again till the next afternoon. Then the conversation is resumed in the second *Dialogue*, and once more Philonous has the upper hand. Hylas is soon driven to admit that even his own body and his own brain, the supposed organ of thought, are nothing but complexes of perceptions existing in his own mind.

But Philonous, it soon turns out, has not the courage of his convictions. Hylas, quite properly, confesses himself converted to a thorough-going skepticism regarding the real existence of anything but his own experience. So it is that we now find Philonous accepting the intimations and external references of our perceptions as valid, in spite of the skeptical doubt that could properly be urged against such an acceptance. To Hylas' remark that Philonous by rights is as much of a skeptic as he is, Philonous objects. He has, he says, denied only the reality of sensible things, considered as existing absolutely "out of the minds of spirits, or distinct from their being perceived." But that does not prevent them from existing in some other mind, as for example, in the mind of "an infinite omnipresent Spirit, who contains and supports them." In support of the existence of such a mind Berkeley adduces much the same arguments as Locke brings forward in favor of an external cause of our sensations.

Hylas, however, still remains obdurate. Supposing that there is a God, is it not still possible, as the Cartesians maintain, that besides spirits and ideas there is a material world, and that this world is the "subordinate and limited cause of our ideas"? Or may not Malebranche be right in his theory of "vision in God," according to which the soul, "incapable of being united with material things, so as to perceive them in themselves . . . perceives them by her union with the substance of God" and by knowing the ideas or representations of material objects existing in the divine mind? Philonous replies that the arguments against the possibility of our ideas representing non-material objects hold true for the divine mind also. As for *matter*—how can matter *cause* immaterial ideas, or what need has God of it as a subordinate *instrument* for *occasioning* ideas in us?

Existence and Spirits. Hylas, shaken in his beliefs, begs for time off to run things over in his thoughts, and suggests that they meet the

next afternoon for the third *Dialogue*. The day after finds him plunged in gloom. He is convinced that *material substance* is no more than a false and groundless hypothesis, but he cannot quite see how things can exist simply as ideas in the divine mind. Nor can he understand how it is any more possible to have ideas of spirits, which Philonous himself has admitted to be "a sort of beings altogether different from them," than it is to have ideas of material things. To say that "there is spiritual substance, although you have no idea of it; while you deny that there can be such a thing as material substance, because you have no notion or idea of it" seems to him to be not quite fair dealing. "To act consistently" Philonous "must either admit matter or reject spirit."

Philonous replies that the idea of material substance is inconsistent in itself and that no reason can be brought forward for believing in the existence of matter. I am not conscious of either its existence or its essence. On the other hand, although I have no direct intuition of my own spirit and no immediate evidence or a demonstrative knowledge of the existence of other finite spirits, the existence of spirits in general is not self-contradictory, and I do have reflective knowledge of my own soul. I know "that *I myself* am not my ideas, but somewhat else, a thinking, active principle that perceives, knows, wills and operates about ideas."

The Divine Mind and Experience. Hylas, however, still objects. Common sense insists that "*to be perceived* is one thing, and *to exist* is another," and that objects have a being of their own apart from being experienced by any mind. Also, how are we to distinguish between fact and fancy? How are we to absolve God from being the direct "author of murder, sacrilege, adultery, and the like heinous sins"? And must we not say that God suffers the same pain and uneasiness in himself as are often connected in our minds with these same ideas when he implants them in us? To these objections, Philonous replies that there is nothing in the external reference of a man's ideas which is repugnant to the Christian religion or denies that their object, "existing without his mind, is truly known and comprehended by [that is, *exists in*] the infinite mind of God." As for ideas representing the various sorts of moral evil, such ideas are produced, not by the infinite mind, but by the free activity of our own spirits. Again, pain and uneasiness are *understood* by God, but are not *felt* by him. He knows what they are, but, being without those complexes of ideas which represent the bodies, passions, and parts, and with which the

sensations of pleasure and pain are connected, he cannot himself *experience* either suffering or enjoyment.

But Hylas continues to struggle. Appealing to the Cartesian argument, he asks whether God would implant in us so strong a suggestion that a physical world exists if there were really no such thing as matter. That would be deceiving us. The answer is, says Philonous, that God does not deceive us. All that he suggests is that an *external* world exists. This suggestion is trustworthy. He does not suggest that the external world is *material*. The materialistic hypothesis is self-deception on our part, and can easily be dispelled by the use of the intelligence with which God has endowed us.

"Sameness" of "Similar" Objective Impressions. But how, continues Hylas, can we ever perceive the *same* object. There will be as many so-called experiences of the same object as there are spirits, plus God's experience which is supposedly the *real, external* object that the other spirits are perceiving. But wherein lies the *sameness* of all these distinct ideas, which all the spirits, including God, are entertaining? There would seem to be merely as many experiences, or objects, as there are spirits, human and divine, without any single and common point of reference to make them, though different, perceptions of the *same* thing.

Philonous, now on the defensive, asks what we mean by *same*, and what difference does it make what we mean. Identity is a very loose term. Suppose, for instance, a house were all pulled to pieces and rebuilt inside, so that only its outer walls remained unaltered. Would that house be the same or not the same? You might say, "Yes"; I might say, "No"; but we should nevertheless "perfectly agree in our thoughts of the house, considered in itself." Anyway, the materialists are in the same boat. They, too, experience different objects. There are as many ideas of an object as there are materialists thinking that they are looking at one.

"Not at all," Hylas replies. The materialists believe that their several ideas of an object have some "archetype" or point of reference outside their minds, which makes their several complexes of sensations, ideas of one and the same object. Philonous retorts that the Berkeleians believe exactly the same thing. Your idea and my idea do refer to one and the same object existing outside both our minds: to wit, God's idea.

But how, Hylas asks, can an extended world exist in an unextended mind? Since the mind is unextended, replies Philonous, nothing can exist *in* it, literally speaking. The phrase "in the mind" is merely a

figure of speech, to designate the activity of experiencing. Very well, but how are we to reconcile the Biblical account of creation with this transforming of things into ideas? That is easy to explain. There is nothing in Genesis inconsistent with supposing that God first created finite spirits and then implanted in their minds that complex of his ideas we call the universe.

"Esse = Percipi." We may now sum up Berkeley's philosophy in the famous phrases of his own choosing. *Esse* is *percipi* or *percipere*. Nothing exists except perceiving or being perceived. Spirits and their ideas—that is all there is to existence. Reality, then, is constituted of immaterial thinking substances and their experiences and thoughts. One of these thinking substances, God, is eternal and infinite, the others are created and finite. In finite spirits there are experiences and ideas of two sorts, some produced by their own perceiving and thinking activities, others (which we call the external world) imparted to the finite minds by the infinite mind through the process that we call knowledge. Matter is nonexistent as a substance or substratum. At the most, it is only a convenient name for those complexes of perceptions or ideas which we call physical objects. These objects, to be sure, are external to the finite spirits, but in so far as they exist outside the finite minds, they exist in the mind of God and nowhere else.

V. THE "ALCIPHRON" DIALOGUES

Ethics. The *Alciphron* dialogues add little that is new to the point of view we have just set forth. Their tone is predominantly theological and moral. In them Berkeley fills in with the conventional Christian idea of God his philosophically outlined picture of an infinite mind whose thinking creates and supports the universe. He is particularly concerned with confuting atheists and free thinkers and in defending revelation and a system of absolute morality based upon supernatural foundations. With this end in view he sets up a group of "minute philosophers," as he calls the free thinkers, and gives them their say. He then proceeds to demolish the arguments he has put into their mouths against any morality or for a naturalistic ethics, and against all religion or for a natural one.

The content of Berkeley's ethics, such as it is, is not particularly noteworthy. It does, however, seem to have changed somewhat as time went on. In his earlier work, he had defined happiness as the greatest amount of pleasure and the least of pain in the long run. Only an intelligent being is capable of achieving a balance of pleasure, since the use

of reason and intelligence is necessary in estimating the comparative value of pleasures and pains past and future, and in devising the means of ensuring a maximum of enjoyment in life, rather than of suffering. In the *Alciphron* dialogues, however, he has become less hedonistic. Man is now regarded as exclusively *rational* in his essence. Therefore, only rational pleasure is distinctively *human*. Sensuous pleasure remains the natural and essential good of the lower animals, and in as much as man also has an animal as well as a rational side, it solicits his lower nature and is an object of desire. But true happiness is to be had only from the satisfaction of our reason, which to Berkeley means obedience to the will of God.

Epistemology. Again, in the seventh and last *Alciphron* dialogue, and in the *Siris*, Berkeley's theory of knowledge has become less empirical and nominalistic. He uses, to be sure, his doctrine that general concepts and abstract ideas are particular images used as signs or symbols to rebuke the scientists for supposing that their concepts are clearer or more comprehensive than those of theology. We can, for example, form as clear an abstract idea of grace as we can of force—which is not to say that either of the ideas is clear. Both are confused and inadequate, but the one is not more so than the other.

At the same time, knowledge has become for him more than perception, and the understanding is beginning to emerge as a faculty distinct from sensation. Abstract ideas are coming to be regarded as so remote from percepts as to be almost detached from them, and their origin, it is hinted, is to be found, not in sensations, but rather in the mind's reflection upon its own activities. In other words, there is a tendency to derive mathematical and scientific truths from the nature of *spirits* rather than from *ideas*. But these tendencies never came to a head.

Chapter X

HUME

I. LIFE

Education and Character. David Hume, the third and last of the great British empiricists, was born at Edinburgh in 1711, of the family of the Humes of Ninewells, related to the Earls of Hume. Losing his father in his youth, he was brought up by his mother, who was a woman of great force of character. At twelve years of age he matriculated at the University of Edinburgh, where he received a thorough education in the classics and became acquainted with Greek and Roman philosophy.

The six years after his graduation he spent between Ninewells and Edinburgh, reading, studying, and thinking. He was preparing for the bar, but he was also beginning to work out his philosophy. By this time, too, his essential temperament displayed itself. He was prosaic, with little sense of the romantic or the beautiful and no appreciation of art and music. Music he considered mere noise, Gothic architecture a heap of confusion and irregularity, and Shakespeare a disproportionate and misshapen giant. The last criticism may have been motivated in part by his Scotch dislike of the English, for Hume was a thorough and typical Scot. These clouds, however, had silver linings. Though he lacked esthetic sense, he had a keen sense of the ridiculous and a wit and humor which were always kindly. He was an acute observer and critic, and his mind was broad, tolerant, and fair.

Hume, however, never went to the bar. His studies produced in him a curious crisis of mental revulsion and of disgust not only with the law but with philosophy as well. He was suddenly seized with a yearning for the practical and got a job in a merchant's counting-house in Bristol. The experiment did not work. He could not stomach either the town or the counting-house. So he broke away altogether, crossed to France and settled down for two years at La Flèche, where Descartes had gone to school, and wrote the *Treatise of Human Nature*.

In 1737 he returned to London with the manuscript and got it published two years later. He had hoped the book would make a stir. But it did not cause a ripple. It fell, as Hume himself said, "dead-born" from the press, without reaching such distinction as even to excite a murmur among the orthodox. In his disappointment he abandoned philosophy, turned to history and economics, and in 1741 published his *Essays, Moral and Political*.

By this time Hume was becoming known and was gathering round him a little circle of brilliant friends, of whom the most noted was Hutcheson, the moralist. He tried also for the chair of moral philosophy at Edinburgh. But the *Treatise* had not fallen altogether still-born, and the University turned him down because of his opinions.

Diplomatic Career and Life in Scotland. In 1745, he passed a disagreeable year attached to the service of the crazy Marquis of Annandale, and the next year had an equally abortive adventure as secretary of a projected expedition under St. Clair against the French in Canada, which ended in a fizzle with a naval raid on the Breton coast. But St. Clair took a fancy to him, and, on being chosen chief of a military embassy to Turin and Vienna, invited Hume to accompany him as his secretary. Hume traveled with him through Holland, up the Rhine to Frankfort, thence to Ratisbon and Vienna, and back by the Tyrol and Italy. But he had no eye for scenery or tradition, and was wholly immersed in the politics and human affairs of the countries he visited.

In 1748 he published his *Enquiry into the Human Understanding*, in which he revised and condensed the *Treatise* in a manner more acceptable, as he thought, to the public. A year later, his mother died and he returned to Ninewells to continue the revision of the portions of the *Treatise* dealing with ethics. This appeared in 1751 under the title of *Enquiry into Morals*. It was followed within a twelvemonth by his *Political Discourses*. Once more, he tried for a professorship—this time, the chair of logic at Glasgow—and once more his opinions proved too shocking for a virtuous and respectable university to stomach. However, he did get the job of librarian of the Advocates' Library in Edinburgh, though even in this case there was some opposition because of his views. He held the post for six years. Meantime he was always writing. His *History of Great Britain, containing the Reigns of James I and Charles I*, appeared in two volumes in 1754 and 1756 and succeeded in offending everybody. A year later came the *Natural History of Religion*.

Resigning his post at Edinburgh, Hume spent a couple of years in

London, writing as usual. The fruits of this period were his friendship with Edmund Burke and the *History of England under the House of Tudor* (1759).

Life in France. In 1763, the war between Great Britain and France being at an end, a British Ambassador, Lord Hertford, was sent to Paris, and Hume was made secretary of the embassy. At court and in French literary and philosophical circles Hume received a tremendous ovation, like that which later was tended to Benjamin Franklin. Many of his works had been translated into French, and his wit, his irony, and his refined skepticism, which outraged British respectability, were congenial to the spirit of the Enlightenment, then at its height in France. He was feted by the Dauphin at Versailles, and—a rare honor for a philosopher—listened to three eulogies recited by three little future kings, the Dauphin's children, later the ill-fated Louis XVI, Louis XVIII, and Charles X. He enjoyed Paris and all the flattery immensely and much preferred the French to the English. But he was not taken in by their adulation. He also made friends with D'Alembert, the celebrated mathematician and philosopher, with Diderot, the author of the great *Dictionnaire Encyclopédique*, and also with Turgot, the economist, later Minister of Finance under Louis XVI. After Hertford's recall in 1765, he was left as *chargé d'affaires* at Paris for a time. A little later Hertford, on being appointed Lord Lieutenant of Ireland, asked Hume to accompany him to Dublin.

Return to Edinburgh and Death. Hume refused. Instead, he returned to England, accompanied by Rousseau, whom he had befriended, and with whom he later quarreled violently and still later was reconciled. The next year (1766) he went back to Edinburgh, where he was made Under Secretary of State for Scotland. The remainder of his life was quiet and uneventful. He bought a house in Edinburgh, where he lived quietly with his sister. In 1775 his health began to fail, and, knowing that his disease was fatal, he wrote his autobiography entitled *My Own Life*. The next year he died.

There has been considerable discussion of the comparative merits of the *Treatise* and the *Enquiry* as an exposition of Hume's philosophy. Hume himself preferred the *Enquiry*. On the other hand, the champions of the *Treatise* point out that much of great value has been altogether dropped in the later work, or has been so condensed as to lose in large measure its original force.

II. THE DERIVATION OF IDEAS FROM EXPERIENCE

Impressions and Ideas. In the flow of conscious experience, Hume tells us, we distinguish two sorts of things. On the one hand, we have *impressions*, in which are to be included not merely our sense-perceptions but feelings like love, hate, desire, will, etc. On the other hand, we have *thoughts* or *ideas*. Hume, it will be noted, restricts the term "idea," used by Locke and Berkeley indiscriminately of all experiences, and employs it in the more usual and modern sense of the word. The distinction between *ideas* and *impressions*, he continues, lies in the greater degree of force and vivacity accompanying *impressions*. In comparison, *ideas* are pale and cold. This is because the *idea* is the work of *memory* and *imagination*, and only mediately of direct *impressions*.

Hume, however, is as insistent as Locke and Berkeley that all our ideas, though they seem sometimes to transcend experience, are derived from impressions. The so-called creative power of the mind "amounts to no more than the faculty of compounding, transposing, augmenting, or diminishing the materials afforded us by the senses and experience." No idea whatsoever can be found that is not decomposable into terms of experience, and, wherever sense-perception is lacking, the corresponding ideas are lacking also.

The Derivation of Ideas from Impressions. Hume has, then, on his hands precisely the same problem as confronted Locke. How are we to derive *from* experience ideas that seem to *transcend* experience? To answer this question, he begins, as Locke began, by giving an account of the way in which all ideas are built up. The construction of ideas is due to *association*. Impressions, as they occur, arouse memories and images of *similar* impressions, or of *contiguous* impressions that happened near by or at the same time, or of impressions considered their *causes* or their *effects*. Whole blocks of impressions given together are revived together in connection with the circumstances of their occurrence. Thus we come by *complex* ideas, like those of *substance*, *modes* or qualities, and *relations*. Among the relations of importance to philosophy are *resemblance*, *identity*, *spatial* and *temporal arrangement*, *quantity*, *degree*, *continuity*, and *cause and effect*.

Of modes and substances, Hume disposes in short order. He dispenses with Locke's "something I know not what" and insists like Berkeley that we have "no idea of substance distinct from that of a collection of particular qualities." But the idea is more than a mere

aggregate of qualities or modes. It comprises also "a principle of union," based upon contiguity and causation. "The simple ideas, on the other hand, of which modes are formed, either represent qualities, which are not united by contiguity and causation, but are dispers'd in different subjects, or if they be all united together, the uniting principle is not regarded as the foundation of the complex idea."

Nature of Abstract Ideas. We cross now into the field of relations. In doing so, we must keep in mind that there is no such thing as an absolutely *abstract idea*. Hume agrees with Berkeley that all ideas are particular and concrete. They are images or pictures made to stand for and signify a host of other particular things whose images are like or associated with the representative image.

Words or names, in being generally applied, do not have to recall all the images associated with them. They simply revive the "custom we have acquired of surveying them," or a sort of vague composite photograph of the general features in which all the particular images are potentially present. "A particular idea becomes general by being annexed to a general term; that is, to a term which from a customary conjunction has a relation to many other particular ideas and readily recalls them in the imagination."

With these considerations before us, we turn back to the task of deriving from experience such abstract ideas as seem to transcend it. We begin with *space* and *time*. The idea of their infinity and infinite divisibility, which had bothered Locke and had been defined by him as a negative idea, Hume disposes of in short order. We have no idea of infinity, he says. Ideas are drawn from experience and are adequate representations of experience. Spatial and temporal experience never presents itself as infinite or its objects as infinitely divisible. Therefore there can be no such thing as infinite space and infinite time.

Again, empty space and time are nonexistent. The idea of extension is the idea of an extended *content* of some sort or other.

In like manner, "the indivisible moments of time must be filled with some real object or existence, whose succession forms duration and makes it conceivable by the mind." Moreover, that object must be a changing object, since experience of an unchanging content would give us no idea of succession and therefore no sense of the passage of time.

Time, however, is not an idea added to the ideas of the separate events that occur in succession. If I hear five musical notes, I do not have *six* impressions, composed of the impressions of five sounds *plus* an independent, sixth impression called "time." The notice I take of

time is only a notice "of the *manner* in which the different sounds make their appearance," or, in other words, an abstraction of an idea of *succession* from successive events.

It follows from what we have been saying that there is no such thing as absolute, mathematical space or absolute motion and time. Geometry is not an exact science. "It takes the dimensions and proportions of figures justly; but roughly and with some liberty." Again, since the notions of equality and of "greater than" and "less than" are relative, we cannot devise any absolute standards or instruments of measurement. So, too, no exact means of estimating comparative velocities can be found. All standards of measurement both of extension and duration are at the best approximate.

III. MATTERS OF FACT

Matters of Fact and Belief. All objects of knowledge may be divided into two kinds, *relations of ideas* and *matters of fact*. The relations of ideas are worked out according to the laws of logical implication. Matters of fact are not connected logically, since the contrary of any fact is conceivable. They are connected by cause and effect.

But how do we distinguish what we call *facts* from what we call *fancies*? This distinction involves a mental attitude of *belief* in *facts*, *disbelief* in *fancies*. Belief, Hume defines as "a lively idea related to or associated with a present impression." It is, he adds in the *Enquiry*, "nothing but a more vivid, lively, forcible, firm, and steady conception of an object than what the imagination alone is ever able to attain. . . . It consists not in the peculiar nature or order of ideas, but in the *manner* of their conception and in their *feeling* to the mind." This feeling is sense of *reality*. What we believe in we consider to be a *fact*. "I confess," says Hume, "that it is impossible perfectly to explain this feeling or manner of conception. . . ."

But why is it that some ideas inspire and are accompanied by *belief*, others not? In the first place, Hume replies, belief is founded upon impressions. Impressions are sensations. They are *there*. We cannot get away from them. Nothing could be more *real* than they. So it is that they, and the memories of them, are bound to be more vivid and living than ideas about them or pictures of them constructed by the imagination.

Fact and Fancy. But no *idea* of any object, however vivid it may be, actually presents that object to our senses and makes us believe in its *existence*. To *believe* in the *existence* or reality of a horse or a

centaur, for example, we must *see* one. Illusions and hallucinations are, after all, deceptions of the *senses*. But generally speaking, we do *see* horses; we do not see centaurs. It is the corroboration of the idea of the horse by the *impression* of the horse that gives the idea factual value, and it is the failure of experience to support the idea of the centaur with an impression or perception that makes the centaur a fancy.

Still, some people occasionally do *see* hallucinations which awaken in them a very lively *belief* in their *reality*. What of them? If we all saw centaurs with the frequency and the regularity that we see horses, they would be just as *real* and would excite the same belief. But we don't. A further and perhaps final distinction between matters of fact and fancies and illusions is that the impressions we call matters of fact constantly *recur* and keep recurring in the same context of associations and circumstances. Thus the belief which any impression, even a hallucination, inspires, is reinforced and strengthened, in the case of matters of fact, by the continued repetition of the impression.

As to the origin of our sense-impressions Hume is noncommittal. "Their ultimate cause is," he thinks, "perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty whether they arise immediately from the object [Locke], or are produced by the creative power of the mind [Leibnitz], or are deriv'd from the author of our being [Berkeley]."

IV. CAUSE AND EFFECT

The Causal Relation. We pass now quite naturally to *cause and effect*, since the belief that matters of fact are causally connected is almost as strong as the belief in their reality. We spontaneously ask *why* any given matter of fact occurs, and as spontaneously answer that it is *caused* by some other matter of fact. What, then, is the ground of this belief? There certainly seems to be no necessity for such a belief. Causes do not announce themselves as such. They have always to be discovered. Or again, from a quite novel impression we can get no idea of how it will behave and what it will give rise to. Certain impressions are the *causes* of certain others only because they have proved *de facto* to be so. Until the particular effect has been produced the so-called cause is not the reason for its production.

Nor can we argue for the necessity of causation on the ground that its opposite is logically inconceivable. It is not inconceivable that nothing should exist. Therefore, the existence of the universe is not

logically necessary and does not require a reason. But if existence as a whole does not have to be explained, why should the existence of a particular object at any one time or place have to have a cause?

The Earmarks of Causality. What, then, are the earmarks of the causal relation? [In the first place, a so-called cause and its effect must be *contiguous*. There can be no spatial gap between them. There can be no action at a distance. Again, the cause must *precede* its effect, and the effect *follow* its cause in time. But here again, the effect must be contiguous to the cause, must immediately follow it. Causality can no more jump gaps in time than it can gaps in space.]

[But "an object may be contiguous and prior to another, without being consider'd as its cause. There is NECESSARY CONNECTION to be taken into consideration; and that relation is of much greater importance than any of the other two above mention'd." We feel that any impression considered to be the cause of another simply *must* be followed by that other, and that any event considered as the effect of another *must* succeed whatever is regarded as its cause. It is this sense of *must* which distinguishes causal connection from coincidence. In coincidence, the contiguous and prior event *need* not be followed by its sequent. Its sequent is not its consequence but has its explanation elsewhere.]

[The feeling of *necessary* connection is often expressed by saying that the cause *produces* the effect, and that the effect *is produced* by the cause. But we never experience the process in which one event is *produced* from another, nor do we perceive in any one impression any *power* to bring another into being.] For that matter, we do not even experience any power or any process of production in our own inner experience, as Locke maintained. We will, to be sure, that our arm or leg should move, and it does move. But we do not perceive the link between our volition and the ensuing movement. We do not perceive our will *making* the arm or the leg move as it desires.

This conclusion holds good not only for the causation or production of one body by another and of bodily movement by human volition, but also for any causal and creative activity we may try to impute to God. We are "equally ignorant of the manner or force by which . . . even the supreme mind operates either on itself or on body." For "we have no sentiment or consciousness of this power in ourselves" and "we have no idea of the Supreme Being but what we learn from reflection on our own faculties."

The *necessity* implied in the idea of causation is neither an *a priori* necessity of logic nor an obvious *a posteriori* inference from experi-

ence. It is an outcast from the only two fields in which knowledge is possible, relations between ideas and relations between matters of fact. But, although we cannot know that such necessity exists, we can, Hume thinks, show how the *feeling* of necessary connection between impressions arises from experience. To this he now applies himself.

The Feeling of Necessary Connection. The key to the situation he finds in the *association* of ideas. Not only does the flowing character of impressions make the mind expect that any present content of experience will be followed by something or other, but the fact that impressions occur over and over again in *similar* sequences, and that one specific event is invariably followed by another specific event, gets the mind into the habit of looking for certain sequents and no others, when certain antecedents occur. This habit of leaping forward to and expecting the sequent associated with the antecedent becomes so ingrained by continual repetition of their conjunction as to make the mind feel that when the one event occurs the other simply *must* follow it. Conversely, in looking backward from any event, the mind feels that the impression *must* be connected with the antecedent with which it has hitherto been invariably associated. Events so habitually conjoined and associated as to be accompanied by this feeling of *must* are called *cause* and *effect*, and the relation of simple sequence is turned into one of *causation* or *production*. ✓

A cause, then, we may define as "an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other." So, too, with the feeling of necessity. "The necessity or power which unites causes and effects lies in the determination of the mind to pass from one to the other."

The Causal Relation Subjective. It follows that the causal tie and the necessary connection supposed to subsist between cause and effect exist, so far as knowledge is concerned, entirely in the mind. They cannot be said to exist in the external world, because, in the first place, we have no certain knowledge that such a world exists and no knowledge of what it is like if it does exist. Nor are they in themselves impressions or qualities of impressions, as we have already pointed out. Our ideas of them are drawn from a *feeling*, which arises from a custom or habit of association. But it *guarantees* nothing. We cannot know for certain that in the past or in the future given antecedents will have the consequences they now have. There is, therefore, no *a priori* impossibility of miracles, though in weighing the evidence for them, we must establish a greater *probability* of their occurrence than

of error or deception on the part of those who testify to them. But this opens up a new question. What do we mean by *probable*, and where do we get that idea?

V. PROBABILITY AND CHANCE

The idea of probability is intimately bound up with that of causation and of its opposite, *chance*. In pure chance the mind expects no one thing to occur more than another. If, for example, I throw a pair of unloaded dice, or a single die, I feel that the chances are equal that any one of the sides may turn up as the result of the throw. To feel it more *probable* that one side rather than another should turn up, there must be some admixture of feeling of causation, which makes it customary for me to expect that event. And my feeling of probability will become stronger as *feelings* of causation connected with the situation become more numerous. Nevertheless, since there is a large admixture of chance, that is, of ignorance of determining causes, I experience more or less doubt as to the outcome, which I express by saying that the chances of its occurring are greater or less.

But why does a feeling of probability accompany a superior number of chances? It is not a necessity of thought that it should do so, nor is it a quality of one or of any number of impressions taken in themselves. Hume explains it as follows. Take, he says, our die, and mark two of its sides with one figure, and the remaining four with another. We throw the die, and consider the "turning up of each particular side as alike probable." But, finding that the number marked on four sides of the die does, as a matter of fact, turn up more often than the number marked on two the mind forms the habit of expecting the figure inscribed on the four sides of the die to turn up more frequently than the figure inscribed on two, and a more intense feeling of probability attends the superior number of equal chances.

In estimating the *probable* causes of events, or in predicting their probable effects, the same considerations hold true. The feeling of probability is intense in proportion as events have been found to go together, though in complicated situations where a variety of causes are at work allowance must always be made for the intervention of other causes in producing the effect. Our predictions of natural events are no whit different in principle from our predictions of how the dice will fall. We base them upon the occurrence of similar events in the past, to which we give weight in proportion to frequency.

VI. FREE-WILL

Having disposed of causation and probability, Hume in the *Enquiry* takes up at once the question of free-will, treatment of which in the *Treatise* is postponed to the book on the *Passions*. Since among men we observe the same uniformity of behavior as in nature and find the same motives always producing the same actions, both in our midst and in the past as recorded by history, we must assume the same necessary connections in the conduct of human beings as in the occurrence of physical events. Since, however, human individuals are infinitely varied in character, we do not expect "that all men, in the same circumstances will act precisely in the same manner," especially as "such uniformity in every particular, is found in no part of nature."

By liberty, then, when applied to voluntary actions we can only mean "*a power of acting or not acting according to the determination of the will*; that is, if we choose to remain at rest we may; if we choose to move we may." To maintain a free-will of indifference, is to make freedom "the same thing with chance; which is universally allowed to have no existence."

So far Hume has gone hand-in-hand with Locke. Now he proceeds to point a moral to his tale. The ethical consequences of a free-will of indifference are exactly opposite to what its defenders suppose they are. Such freedom, instead of making men responsible for their actions, really makes them irresponsible. For, if a person's choices and actions are not determined by his character, they are no index to his character and acquire for him neither praise nor blame. Hence "it is impossible he can, upon their account, become the object of punishment or vengeance."

Hume's consideration of liberty leads him still further afield into a discussion of the relation of human freedom to divine foreknowledge and providence and of the relation of sin and evil to the divine benevolence. He points out that those who uphold the omnipotence and the universal providence of God find themselves in a dilemma. If God foresees and foreordains all things, then either evil and sin do not really exist, or God is not really good. The argument that all things are really for the best and that the imperfection of the part contributes to the perfection of the whole, may be all very well in theory, but it is weak and ineffectual in practice. Far from being a consolation in time of misfortune and suffering, it is calculated to exacerbate our woes. "You would surely more irritate than appease a man lying under

the racking pains of the gout by preaching up to him the rectitude of those general laws which produced the malignant humors in his body . . . where they now excite such acute torments." Nor, where moral relations are concerned, does a man who is robbed of a considerable sum "find his vexation for the loss anywise diminished by these sublime reflections."

On the other hand, it is impossible "to explain distinctly how the Deity can be the mediate cause of all the actions of men, without being the author of sin and moral turpitude. . . . To reconcile the indifference and contingency of human actions with prescience; or to defend absolute decrees, and yet free the Deity from being the author of sin has been found hitherto to exceed all the power of philosophy."

VII. BELIEF IN THE EXISTENCE OF AN EXTERNAL WORLD

External and Real Impressions Distinguished. Returning now "with suitable modesty" from "these sublime mysteries; and leaving a scene so full of obscurities and perplexities," for "her true and proper province, the examination of common life," philosophy finds herself confronted with one more common and deep-seated belief that needs explanation—the *belief in the existence of an external world*. This belief incidentally must not be confused with the belief in the *reality* of impressions, which is the basis of our distinction between fact and fancy. For the superior vivacity and warmth, which make impressions *facts*, do not account for the feeling of *externality*, of existing *outside* our minds, in which we also put our trust.

The belief in the existence of an external world contains two factors, a faith that objects exist distinct from and external to ourselves, and a faith that objects continue to exist even when unperceived by the mind. These two beliefs are distinct because there is nothing in the faith in the *external* existence of an experienced object that necessarily carries with it a faith in its *continued* existence when unexperienced. Believing that an external object is there when I am experiencing it is not the same as believing that it goes on existing when I am not experiencing it.

The Senses and the "Self." How do these beliefs arise? Neither of them, any more than the belief in causation, has any foundation in sense-impressions, which never present us with either the continued or the external existence of objects. Our sense-impressions of any one object are frequently interrupted in all sorts of ways, and while they are interrupted the object certainly is not present to us. Nor do they

acquaint us with the externality of the object. To perceive a thing to be *outside* us, we should have to perceive *ourselves* to be outside the thing. To do that we should have to have an impression of our "self." This, however, raises the difficult question of "how far we are *ourselves* the objects of our senses." Hume replies that the problem of the self is one for the most profound metaphysics to deal with. The senses no more give us a "self" behind the flow of our perceptions and feelings than they give us a substance behind a group of "objective" qualities or a "necessary connection" between events. "'Tis absurd, therefore, to imagine the senses can ever distinguish betwixt ourselves and external objects." All our impressions, "external and internal, passions, affections, sensations, pains and pleasures are originally on the same footing."

Reason is no better foundation for the belief. There is no *logical* ground for believing in an external world. On the contrary, it is just reason and logic that undermine our naïve faith in its existence and cast skeptical doubts upon our unsophisticated attribution of external, objective existence to what are really internal, subjective impressions.

External Objects and the Imagination. Where, then, is the seat of this belief? In the *imagination*, Hume answers. We neither perceive nor infer the existence of an external world; we *imagine* it to exist. Even so, how does such a belief attach itself to imagining? The component parts of all imaginings are provided by sense-impressions, and the belief has no foundation in them. For not only are all sense-impressions just experiences and nothing more, but "external" experiences are no more involuntary and violent in character than "internal" ones, Descartes and Berkeley to the contrary notwithstanding.

There are, however, two reliable peculiarities of such impressions as are imagined as external and as continuing to exist even when they do not impress us. In the first place, they "have a peculiar *constancy* which distinguishes them from the impressions, whose existence depends upon our perception." They recur, after interruption, just, or almost, as they were.

"This constancy, however, is not so perfect as not to admit of very considerable exceptions." Still the general context is there, and the changes are such as I can explain. In spite of some inconstancy, the recurrence of my impressions is *coherent*, and their *coherency* is the second distinguishing characteristic of impressions believed to be external.

We now "proceed to examine after what manner these qualities give rise to so extraordinary an opinion" as continued existence. So

far as *coherency* is concerned, it seems at first sight to be on the same footing as necessary connection. It is based upon repeated associations of ideas, *plus* an extension of that association to fill in the gaps in my perceptions. Our habit is to interpolate a succession of images between past and present and to imagine their continued existence in the unperceived interval between the two perceived moments.

Nevertheless, the idea of continued existence differs in certain important respects from causation. The idea of causation arises from a regular succession of perceptions, and does not suggest a *greater* regularity than that which is perceived. But the idea of continued existence bestows on objects a greater regularity and a more enduring connection "than what is observed in our mere perceptions." We are, therefore, confronted with the difficulty of understanding how we can imagine *more* regularity and coherence in our perceptions than that which we actually perceive.

Similarity, Sameness, and Constancy. Furthermore, why does a recurrence of *similar* impressions give rise to the idea of the *same* object? After all, in connecting up the past with the present impression, all I do is to interpolate a series of *similar* images that *resemble* the impression I remember and the impression I now have. Why should I believe, then, that an object preserves its *identity* and its *distinct existence* rather than believe that the old object ceases to exist, and a new, absolutely similar one takes its place? There is no more *reason* for the one belief than the other, and the latter belief is really more consistent with experience, which only gives me a recurrence of *similar* impressions.

To deal with this difficulty we must appeal to *constancy*. And to explain constancy we must invoke duration. When we trace time back moment by moment in our imagination and imagine the content of each moment to be similar to that of the next moment, or to change so continuously and explicable as to produce no violent interruption in the train of images, we are able to extract that content from time, and to talk of it as *one*—and the *same*—object persisting *through* time. The *same* object, in a word, is an *invariable* or *constant* content of the several moments of time imagined as *uninterrupted*.

Still, actual impressions give us only the invariableness or constancy necessary to the idea of identity. They do not give us the continuity. Constancy is continually being interrupted. How, then, is the idea of uninterruptedness derived from interrupted impressions? Why do I consider that the constancy has *persisted* while the impression was not there, and believe that the object has remained, and remained the

same object, while it was not only not constantly present, but not present at all?

Similarity and Identity. The gist of Hume's reply is that the imagination is lazy and follows the line of least resistance. When there is a rapid succession of similar impressions, their resemblance "conveys the mind with an easy transition from one to the other," which approximates "one constant and uninterrupted perception." It is more difficult for the imagination to distinguish these impressions from one another than to "mistake the one for the other" and allow them to coalesce into a single picture.

We now see how mere *likeness* gives an image of *identity*, when similar impressions are repeated in rapid succession. But what are we to say when the intervals between the recurrences are much longer? Here again, Hume answers, it is easier for the imagination to regard the new impression as continuous and identical with the old ones than as discontinuous from and merely similar to them. The mind is upset by contradictions and interruptions which derail it from the line of least resistance, and it seeks to avoid and bridge them if it can, and it is much less difficult for the imagination to picture a continuity of existence filling the gap between two similar impressions than to picture the gap as unfilled. Hence we "remove the seeming interruption by feigning a continu'd being, which may fill those intervals, and preserve a perfect and entire identity to our perceptions."

We cannot *know* that objects have *not* existed in the interval, just as we cannot *know* that they have. We must imagine, or "feign," as Hume calls it, in any case, and we must "feign" the one thing or the other. So, naturally, we "make believe" the thing which is pleasanter and less jolting and less startling to the imagination.

Feigning and Faith. But this is not quite all. We do not merely "make believe" that objects continue to exist when unperceived, we *believe* it in sober earnest. How is it that *feigning* becomes *faith*? The reply is that the "matter-of-factness" of an impression is more easily imagined as continuously accompanying the "feigned" perceptions interpolated between the past and the present impression, than as not so accompanying them. To imagine it as interrupted would jar the mind, whereas to imagine the interpolated impressions, also, to be matters of fact makes smooth and comfortable the transition of the imagination from the object as it was last experienced through the "feigned" perceptions of it to our present experience of it. Hence the imagination is able to impart all the warmth and vivacity and reality of my present perception of an object to my "make believe" of its con-

tinued existence when unperceived by me. In this way, my imagination renders the *fiction* of the object's continued existence when *unperceived* as believable and as real as the *fact* of its *perceived* existence here and now.

This belief is transferable by analogy to new objects, whose constancy and coherency we have not had time to test, provided "the manner in which they present themselves to our senses resembles that of constant and coherent objects." As most of our objective experience presents itself in this manner, we come to feign and to believe in the continued existence of an external universe.

VIII. THE IDENTITY OF ORGANISMS, REFASHIONED AND ESSENTIALLY CHANGING OBJECTS, AND SELVES

Hume has so far been dealing with identity of *substance*. He next takes up the identity of organisms, in which the substance is constantly renewed and the structure subject to a process of birth and decay, and the identity of objects, in which great changes are effected, as in the constant repairing of a ship or the rebuilding of a church. In spite of the magnitude and often the sudden and revolutionary nature of change in such instances, we still speak of the object as identical. How can we do this?

In the case of organisms, the answer is easy. The changes involved in growth are so slow and so insensible from moment to moment, that the "make believe" by which the imagination retraces their path is almost as smooth and easy as the path between approximately similar impressions. Hence the vivacity and reality of the present perception are conveyed without difficulty to the images "feigned" between it as it is now and it as it is remembered.

Again, in case of considerable and drastic changes, the idea of the end or purpose of an object, which is an element in the complex idea of the object as a whole, is made dominant, and the attention is fixed upon it. Since the purpose is not altered by the other changes that take place, the imagination is once more able to "make believe" the continued existence of that purpose throughout the process of addition and renovation, and to endow its "fictitious" continuance with the same weight and believableness as attends the actual perception of it.

Finally, it is the nature of some objects, like a river, for instance, to change and move. So, here again, the introjection of images of change and movement is possible without jar to the imagination, and we can speak of the continued existence of the *same* river.

Personal identity is no exception to the rule. "The identity, which we ascribe to the mind of man is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies." We neither can perceive a bond uniting our successive impressions nor demonstrate from reason its existence; any more than we can perceive or demonstrate a material substratum, or a causal nexus, or an identity, in our objective impressions. My subjective impressions are just as broken and interrupted, by sleep or a swoon, for example, as my impression of so-called outer objects, and I "feign" the continued existence of a "self" or identical personality during these interruptions by the same methods and for the same reasons as I feign the continued existence of the external world. While I sleep my *self* is no more a *present* impression than my body or my bed.

Were it not for memory we should have no more basis for feigning personal identity than for feigning identity in objects. "Memory alone acquaints us with the continuance and extent of this succession of perceptions" constituting the self, which is causally connected and believed to be the *same*, in spite of changes of character and disposition. And we can "feign" the continuance of our "selves" through those periods of which we have no memory, just as we "feign" the continued existence of an external object through those periods when we are not perceiving it. And "make believe" becomes belief in exactly the same way. Thus "we can extend the identity of our persons, beyond our memory, and can comprehend times, and circumstances, and actions, which we have entirely forgot, but suppose in general to have existed."

IX. CRITICISM OF THE PRETENSIONS OF METAPHYSICS

Criticism of Arguments for the Existence of an External World. Armed with these arguments, Hume launches an offensive all along the line against the pretensions of metaphysics. He attacks first of all the common inference made from our *belief* in the continued existence of an external world to the *fact* that such a world exists. The reasons for the one, he points out, are not arguments for the other. There is no reason to suppose that our impressions are supported by a material substratum. But there is no more reason to suppose that our impressions have a subjective support in a self, or an objective support in a divine mind. All we perceive and all we can demonstrate is the existence of *our* perceptions, not perceptions of external objects, whether material or divine, but just perceptions.

This skepticism, Hume insists, is not inconsistent with all he has said about the inevitableness of *belief* in an external world of some sort. All he is maintaining is that the existence of such a world is a matter of *faith*, not of knowledge. But, he adds, if at the moment he were forced to choose between discounting that faith and attributing to it the certainty of absolute knowledge, he would say, "I am more inclin'd to repose no faith at all in my senses, or rather imagination, than to place it in such implicit confidence."

Criticism of Realism, Materialism and Idealism. Plato and Aristotle, the Scholastics, the Cartesians, and Locke are all taken roundly to task for exhibiting this implicit confidence. Ideas, forms, matters, substances as distinguished from accidents, the distinction between primary and secondary qualities, are all dismissed as something of which we can have no proof. Hume then turns upon those who believe in the real existence of spiritual substances, spirits, souls, or whatever one chooses to call these non-material entities. To begin with, the idea of such entities is riddled with self-contradictions. It is quite as difficult to explain the relation between a spirit and its ideas and perceptions, as it is between a material substance and its qualities. The assertion which the immaterialists emphasize, and with which Hume agrees, that our impressions and ideas and feelings are immaterial, is no argument in favor of the "spiritualistic" hypothesis. It only renders the hypothesis the more untenable for those who, like Descartes, the Occasionalists and Spinoza, believe also in bodies, since it makes any conjunction or interaction or parallelism of the soul with its body or with the material world utterly unintelligible.

Criticism of Spinoza and the "Theologians." Nay more, the immaterialistic hypothesis, together with the theism founded upon it, is really "a true atheism, and will serve to justify all those sentiments for which *Spinoza* is justly infamous." Spinoza's "hideous hypothesis" that God is a single simple substance of which both extension and thought are the attributes, and of which all particular objects and ideas are modifications, is, Hume remarks, singularly like the theological hypothesis that the impressions which we call natural phenomena "also are modifications, and modifications of one simple, uncompounded, and indivisible substance," the mind of God. If we drop from the Spinozistic system the universe of unknown and incomprehensible *external*, physical entities corresponding to our impressions, we get a result practically indistinguishable from the view Berkeley and other theologians uphold.

Again, as Bayle pointed out in his *Encyclopédie*, all the objections

urged against Spinoza apply equally forcefully to the theism of the theologians. If we urge against Spinoza that matter is not an attribute but a stuff of which physical objects are made, we can with equal right urge against the theologians that mind is not an attribute of God but a substance in itself, albeit immaterial, of which perceptions are made.

Nor, if we object to Spinoza that one and the same simple substance cannot be conceived as taking on contrary and incompatible forms, is it any easier to see how God's mind or our minds can contain at the same time incompatible ideas. Nor, again, is it any easier to see how an immaterial substance like soul can entertain different and contradictory *activities* of perception and motion without violating its simplicity and its unity, than it is to see how a material substratum can act in many different and contradictory ways and yet remain single and simple.

Matter, Mind and Causation. Finally the argument that matter cannot give rise to mind assumes that effects must *resemble* their causes—an assumption for which there is no warrant in the succession of impressions. There is just as much and just as little apparent connection between motion and thought as there is between the position of bodies and the movements which are said to result from it. "Tho' there appear no manner of connection betwixt motion or thought, the case is the same with all other causes and effects." If, then, we argue that bodies cannot think, we are bound logically to argue also that they cannot move, "since there is no more apparent connection in the one case than the other."

As a matter of fact, both conclusions are contrary to experience, in which the different dispositions of the body are observed to "cause" changes in our thoughts and sentiments, quite as clearly as they are observed to "cause" bodily motions. Whence "we may certainly conclude that motion may be, and actually is, the cause of thought and perception," in the same sense and to the same extent that any impression can be said to be the cause of another.

The upshot of the whole matter is that we cannot both have our cake and eat it. We must either deny causation where the mind does not *perceive* the necessary connection between impressions, or we must accept it for what it is—a customary connection which in actual experience obtains between impressions of the most diverse sorts. To choose the former alternative is to deny causation altogether, since the necessary connection is never perceived, and to leave the universe

itself without "a cause or productive principle, not even the Deity himself."

On the other hand, if we accept causation in the only sense of the word that means anything, then, since all matters of fact, without exception, are "susceptible of a constant conjunction," it must follow "that, for aught we can determine by mere ideas, anything may be the cause or effect of anything."

In the Appendix to the *Treatise*, Hume confesses to doubts regarding his treatment of personal identity and the self. He feels that, in spite of his criticism, the self somehow *is* put together again in defiance of all logic, by certain principles that, say what we may, *do* "unite our successive perceptions in our thought or consciousness." But what these principles are, or how they operate, he admits that he has no idea, and adds that he can form no satisfactory hypothesis on that point. It is perhaps significant that, when he came to condense the *Treatise* in the *Enquiry*, he omitted the whole discussion.

Relation of God to Universe. In the *Enquiry* Hume adds somewhat to his discussion of theism in the *Treatise*. He points out that the entire concept of God as the *author* of anything is extremely dubious. Our whole argument from cause to effect is founded upon the connection of one indefinitely large group of constantly repeated and similar impressions with another group of impressions, similar to one another, succeeding the first group with unfailing regularity. One instance of a succession is not sufficient to establish a *necessary connection*.

By rights, therefore, to establish a causal connection between God and the world, we ought to have recurrent impressions of a Deity followed over and over again and with unfailing regularity by the impression of a universe.

In the *Enquiry*, also, and in the *Dialogues on Religion* he points out that even granting we could infer the existence of God from the universe, we should have no right to ascribe to him more wisdom or goodness or power than is actually displayed in the universe, which is his work. We never can have any reason to *infer* any attributes, or any principles of action in him but so far as we know them to have been exerted and satisfied. As the universe stands, it does not suggest the existence of a Deity both all good and all powerful. Nor can we assume a God whose benevolence is limited, since such an assumption evades the question. It is not drawn from experience, which fails to suggest the existence of even a benevolent, if partially powerless, God.

Criticism of Immortality. The idea of immortality is also criticized by Hume. Metaphysically, the idea involves the notion of a spiritual substance or soul, about which enough has been said already. Moreover, even if such substances could be shown to exist, the fact remains that we can forget and do go to sleep on occasion, and hence can be conceived as losing memory and consciousness for good and all. Moreover, there is just as valid a reason for supposing that animals possess these thinking substances as that men do, and just as much reason for believing that our souls exist before birth as that they survive death. But we remember nothing before birth. Why, then, should we remember anything after death? Persistence of personal identity, however, is a matter of memory. If we remember nothing of this life after our death, we cannot be said to have personal immortality.

The moral argument that we must survive death in order to receive the punishments of vice and the rewards of virtue withheld in this life is also fallacious. Vice and virtue are in the long run dealt with in a sufficient manner by society, which is quite capable of protecting its own interests without calling upon a hypothetical heaven or hell for aid. The structure and disposition bestowed upon us by nature determine the human good and suggest that it is something to be realized in this life, not in the next. Nor can we have any ideas of what God wants us to do save those founded upon what we want to do ourselves. Moreover, most of us are such mixtures of good and evil that we deserve neither heavenly rewards nor hell fire. Then, too, what would become of dead infants? They have had no chance to do either good or evil and therefore to *deserve* anything at all—certainly not heavenly bliss or infernal torment.

Finally, coming down to matters of fact from these speculations, the evidence of perception and experience, which never acquaints us with a disembodied consciousness and suggests the disappearance of the mind along with the body, is *against* immortality.

The Origin and Growth of Religion. In the *Natural History of Religion* Hume places the origin of religion in superstition and ranks the primitive gods men create in their own images on a par with elves and fairies and gnomes and similar supernatural imaginings. These anthropomorphic gods get themselves clothed in philosophic concepts and moral ideals, and the history of religion exhibits a constant vacillation between the anthropomorphic and the philosophic poles of thought. Theology is a bad mixture of the two elements. Polytheism is more consistent with experience than monotheism, and is much less intolerant. A monotheistic god is jealous of all other

divinities, and the votaries of such a deity are always bent on persecuting the followers of any other god than their own. Thus all religions based upon devotion to a particular god tend to become cruel and fanatical. They impute to their particular deities sentiments and behavior men would be ashamed of in themselves, and they encourage their devotees to curry favor with the objects of their worship by all sorts of superstitious devices rather than by humane and upright living.

X. HUMAN PASSIONS

The Primary and Secondary Passions. The second and third books of the *Treatise* are devoted to a discussion of human passions and of morals—subjects which were later given a more condensed treatment in the *Dissertation on the Passions* and in the account of morals given in the second book of the *Enquiry*.

Corresponding to impressions and ideas are primary feelings, like pleasure and pain, and reflective impressions or passions founded on these sensations. The passions may be calm or violent and direct or indirect. Direct passions are feelings like “desire, aversion, grief, joy, hope, fear, despair and security”; among the indirect we may “comprehend pride, humility, ambition, vanity, love, hatred, envy, pity, malice, generosity and their dependants.” The indirect or secondary passions are built up out of the primary passions and out of each other by the same laws of association and of the smooth and easy transition of the imagination as govern the processes of the understanding. The primary passions, again, attend, some of them like pleasure and pain, upon the natural appetities of the organism, others like aversion and desire, upon the pleasure-pain complex. For instance, an organic impulse *plus* pleasure or pain gives rise to attraction or repulsion.

The secondary passions may be divided into the pleasurable and the painful and into those which concern the self and those which concern other people. Any pleasurable or any painful passion tends to excite all the other passions of the same affective tone, one after another. “Grief and disappointment give rise to anger, anger to envy, envy to malice, and malice to grief again, till the whole circle be completed.” So, too, joy starts a whole cycle of associated feeling such as love, generosity, pity, courage and the like.

Again, when concerned with the self or with other people, they induce, if pleasurable, either self-satisfaction or love for others as the case may be; if painful, the reverse. This suffusion of both one’s

interest in one's self and one's interest in others with both pain and pleasure gives rise to a complicated system of selfish and social emotions, like family affection, esteem of the rich and powerful, benevolence and compassion, envy, malice, and contempt, and last, but not least, the "amorous passion."

Curiosity the Basis of Philosophy. Finally, Hume takes up the "passion" of general curiosity, or, in other words, the passion for discovering the truth, which is the driving power of philosophy and of the pure sciences. He remarks that the passions for the chase or for gambling and the passion for philosophy very closely resemble one another. In all three cases the pleasure arises primarily from the activity itself, and the value imputed to the stakes or to the quarry is secondary and part of the general pleasure of the game. Thus we pursue truth only in part for any extrinsic value it may have, and primarily for the fun we get out of discovering it. At the same time, to take full pleasure in the game, we must be playing it with a view to winning something useful to us. Half the pleasure is gone unless we are playing for money or for a prize of some sort. Pheasants and partridges are better game than crows and magpies because they are good to eat. In the same way, philosophizing is satisfactory because it combines the pleasures of just hunting or gambling with the satisfaction of bagging or winning something we may put to use. The same is true of our love of mathematics, algebra, morals, politics, natural philosophy and the like, all of which present a game to be played with a stake to be won.

But this is not quite all there is to philosophy. A powerful incentive is also found in the passion for prying and peeping which keeps busy-bodies always delving into other people's affairs. This passion, which is quite different from the love of hunting and gambling, attends upon the fact that the unknown produces less vivid and therefore less pleasurable ideas than the known. Hence we seek to remove pain by acquiring knowledge of the event. So it is that men pry into their neighbors' affairs, wonder what can be the causes of startling and novel happenings, and are always speculating as to what is going on behind the scenes in the universe.

XI. MORALS AND POLITICS

Morality Artificial and Conventional. Passing now to a consideration of morals, Hume finds himself in agreement with Hobbes, in regarding morality as an artificial rather than a natural state of mankind.

Moral behavior is directly instigated neither by reason, which is powerless to motivate action of any sort, nor by immediate impressions. There are no absolute and unmistakable moral ideas and principles which impose upon us *a priori* ethical obligations. Nor, if there were, could reason, which is concerned only with truth and falsehood, ever discover them of itself. What ought to be is founded upon what is. Morality is rather a matter of sentiment and rests primarily upon a feeling of pleasure and satisfaction experienced in some situations which we therefore call *good*, and a feeling of pain in others which we therefore call *bad*. There are no essentially and naturally right or wrong impulses, nor is there any innate sense of right and wrong. Moral sentiment is artificial and conventional and is determined by the circumstances in which human beings find themselves. These circumstances create a "common interest" and "a kind of convention or agreement" between individuals that they will all promote that interest.

Man Naturally Altruistic and "Sympathetic." This agreement, however, does not, as Hobbes maintained, conflict with the natural propensities and first condition of mankind. "Limited generosity" is part of man's native self-interest, and we are endowed with the "natural virtues" of affection and kindness towards our family and friends. We naturally, too, are grateful and compassionate creatures. We take *pleasure* in loving and benefiting those to whom we are attached. But under strictly natural conditions the circle to which we are attached and which it gives us pleasure to benefit is necessarily small and limited. We have no instinctive affection for humanity as a whole, or desire to benefit all mankind. Nor could we ever develop such affection and desire out of our instinctive and *pre-moral* affections (which are also displayed, incidentally, by the non-moral animals) and attain to a sense of general, *moral* obligation, were it not for *sympathy*, or an instinctive interest in other things and other persons existing distinct from our particular affection for some of them. This is capable of indefinite extension, and through its action, our natural "confined generosity," or positive affection for a few other persons, is broadened out so as to include all mankind. *Sympathy*, then, is an indispensable factor in creating the idea of a public interest and in transforming our pre-moral, instinctive virtues into the artifice and convention of morality.

Such an artifice and convention must arise so early in human history that man's "very first state and situation may justly be esteem'd social." It has its rudiments in the necessity, in which even a savage finds himself, of cuffing his offspring into some sort of peace among them-

selves. Therefore, although society is in a sense artificial, it is an artifice to which man is driven by the needs of his nature.

Sympathy and the Public Interest. Since self-interest forces social organization upon men and of necessity becomes identical with the public interest, we are made uncomfortable by the opposition of unrestrained private interest to the public interest, and experience satisfaction when we see the two identified. The one pains, the other pleases us. We approve the one, we disapprove the other. Hence our *sympathies* lie with the assertion of the public interest against unrestrained exhibitions of private interest, and thus give rise to moral standards.

The Origin of Government. But Hume, like Hobbes, finds it necessary to establish somewhere in society a power to enforce justice and preserve order, since the common interest in the observance of justice is not a strong enough emotion to hold in check "the solicitations of our passions, which always plead in favor of whatever is near and contiguous." Thus government, or the lodging of power to uphold society in the hands of a few disinterested persons, arises. Government not only executes and decides justice, but imposes it. In this way the sovereign, besides correcting injustice, prevents it and affords men "a security against each other's weakness and passion as well as against their own."

Government, Hume emphatically asserts, is not always necessary, nor is it impossible for primitive societies to live without it. Moreover, it is not necessarily founded upon the consent of the governed (as Rousseau and other political philosophers were maintaining); neither are all men created free and equal. Nor again, is the "duty" of allegiance to it founded on a delegation of sovereignty to it by the people. Though the "duty" of allegiance may have originated in such a delegation in the beginning, the sentiment of loyalty has become so entwined with other sentiments, and its absence contributes so greatly to the general uneasiness out of which moral disapprobation arises, that the reasons for considering loyalty a *virtue* have become far more complex than any mere promise, expressed or tacit, to obey the sovereign.

In the same way, the foundations of government and the reasons for its sovereignty and stability rest upon a far broader basis in human nature than the simple consent of the governed. The authority of government is, to all practical intents and purposes, derived from force and custom and historic continuity and the disapprobation aroused by the attempt to subvert by force any system of authority standing for law and order, no matter how tyrannical it may have become. So it is

that "men may be bound by *conscience* to submit to a tyrannical government against both their own and the public interest." Nevertheless, there may come a time when these supports are broken down by tyranny, and more moral uneasiness is occasioned by the retention than by the overthrow of government. In that case a society feels it has a moral "right" to rebel, and when it *feels* it has a *moral* right, it has one.

International law, Hume remarks, necessarily is less binding upon nations than the civil law of a state is upon citizens. Since any state is generally able to secure by itself the welfare of its subjects, "the *natural* obligation to justice among different states is not so strong as among individuals," and hence "the *moral* obligation, which arises from it, must partake of its weakness." Therefore, the same sanctity can never attach to international treaties as attaches to contracts between individuals.

Chapter XI

MINOR EIGHTEENTH-CENTURY BRITISH THINKERS

I. GENERAL UNREST OF THE CENTURY

Locke, Berkeley and Hume, although they were the only stars of first magnitude in the British sky during the eighteenth century, were by no means the only luminaries. They were surrounded by a host of stars of lesser magnitude and of various colors. The century, both in England and on the Continent, was reaping the harvest of the Renaissance. Thought along all lines was still breaking loose from the ancient fetters. New ideas, ethical, social and political, were astir. A political philosophy supporting the growing democratic movement was in process of formulation. Religious skepticism and free thought, which formerly had meant revolt against Christianity, now appeared within Christianity itself, in attacks upon the doctrine of the Trinity, in the spread of Unitarianism, and in the general attempt to square Christianity with a rationalistic and free-thinking position and to regard it as one offshoot, among many, of an underlying "natural religion" whose creed was confined to acknowledging the existence of a personal God and the immortality of the soul. This separation of theism from its orthodox Christian setting gave rise to the *deistic* movement. Again, the naturalism and materialism of Hobbes had its heirs and followers. The entire century, both in England and on the Continent, was agitated by the most diverse and conflicting ideas and ideals in every department of human thought.

II. INFLUENCE OF CHINA ON EIGHTEENTH-CENTURY EUROPE

Jesuit Reports of Chinese Civilization. An interesting contribution to the unrest of the times was made by China. European acquaintance with China had dated from the travels of Marco Polo (1254-1324), whose accounts of the court of Kublai Khan aroused the wonder and piqued the imagination of the medieval world. But it was not till the end of the sixteenth century that the reports of Jesuit missionaries at

Peking began to turn China from a fable into a fact. These reports were somewhat disquieting to European and Christian complacency. The Jesuits were not only struck by the material civilization of China and by the advanced character of many of her economic and social institutions, but they were particularly impressed by the purity of the Chinese religion and morality and, above all, by the religious tolerance of the government, which stood out in striking contrast to the bigotry, the intolerance, and the sadistic love of persecution that lay like a canker at the heart of so-called Christian charity. Also, they were puzzled to find that the history of China was not amenable to the chronology revealed in the Bible and recorded events occurring, if not before the creation of the world, at least before the Flood, which, according to the word of God, Noah and his family were the only human beings to survive. How the Chinese could have gone on making history under water was something of a problem for the theologians.

Chinese and Christian Ethics Compared. Such stories proved congenial to the new spirit aroused in Europe by the Renaissance, and a century later were becoming one of the inspirations to the Enlightenment. The Chinese accounts of eclipses that took place before the Flood were confirmed by the new European astronomy and helped foster the attack on the credibility of the Bible and further the general offensive of the Enlightenment against the idea of supernaturally revealed religion. The high order of Chinese morality and religion tended to depose Christianity from the ethical and theological pedestal upon which it had placed itself and to destroy its self-constituted monopoly of true faith and pure morals. Indeed, it might seem that in some respects at least, as, for example, charity and tolerance, the Chinese had succeeded better, despite their ignorance of revelation, than the Christians.

In the last part of the seventeenth and the early years of the eighteenth century indications of Chinese influence are specific. Leibnitz, we may remember, regarded Chinese as the mother of all written languages and urged the compilation of a Chinese dictionary. Also, Malebranche, in answer to an appeal from the Jesuits for a metaphysics of Christianity that might prove palatable to the discriminating intellectual palate of China, composed his *Entretien*, which takes the form of a conversation between a Christian and a Chinese philosopher.

Admiration of Chinese Culture. In the eyes of the Enlightenment, the virtues of Chinese civilization vied with the Arcadian simplicity of

the noble savage as a picture of the goodness of the natural man. Voltaire pointed to them as a refutation of Rousseau's argument that civilization is a regress from perfection, not a progress towards it. And the French economist Quesnay (1694-1774), one of the founders of the "physiocratic" school of economics, to which we shall have occasion presently to refer, held up Chinese economic organization as a rebuke to European conditions.

These influences of China upon Western thought were supplemented by even more obvious effects upon Western art. The architecture, landscape-gardening, furniture, wall-papers, and household ornaments of the period all bear witness to them.

III. NATURALISM AND DEISM

Collins and Bolingbroke. Among the chief exponents of naturalism and deism were Toland (1670-1721), Clarke (1675-1729), Collins (1676-1729), Bolingbroke (1678-1751), Hartley (1704-1757) and Priestley (1733-1804). Clarke¹ used the rationalistic method of deism and the stock arguments for the existence of a God as a prop for Christianity and even for the probability of a divine revelation. Collins,² on the other hand, devoted himself to demolishing the credibility of revelation, and thus to discrediting orthodoxy, by pulling the Bible to pieces and showing up its inconsistencies and particularly the nonsense, as he regarded it, of the prophetic vision of the coming of Christ attributed to the Old Testament writers. Bolingbroke³ was even more violent in his assaults upon revealed religion, which were also directed against all metaphysics as well as against theology. Moses, Plato, the Cambridge Platonists, Descartes, Leibnitz, Clarke and Collins were all fools in his opinion. Their arguments for the existence of God and their admissions at the same time that there is real evil in the world, were as calculated to throw doubts upon the existence and the beneficence of the Deity as were the arguments of the atheists. Both the atheists and the clergy were in a kind of tacit con-

¹ *A Discourse Concerning the Being and Attributes of God*, etc.

² *The Scripture Doctrine of the Trinity; Essay Concerning the Use of Reason*, etc.; *A Discourse of Free Thinking; A Discourse of the Grounds and Reasons of the Christian Religion; Inquiry Concerning Human Liberty; Liberty and Necessity*.

³ *Concerning the Nature, Extent and Reality of Human Knowledge; On the Folly and Presumption of Philosophers; On the Rise and Progress of Monotheism; On Authority in Matters of Religion*.

spiracy to disprove God's existence by the combined stupidity of their demonstrations.

Toland and Hartley. Toland,⁴ after passing through Catholic, Protestant, and deistic phases of belief, arrived eventually at a system of materialistic pantheism. Matter, he said, is not only extended and impenetrable, but is also capable of thought under certain conditions. But, and here Toland severely criticizes Spinoza, its thinking is not co-extensive and parallel with its physical properties. It only thinks in spots, and these spots are animal and human brains. Consciousness is therefore a function of the brain and, when the brain is destroyed, the mind is destroyed with it.

Hartley,⁵ who became a physician because rational scruples stood in the way of his becoming an Anglican priest, always remained in his own opinion a good deist, if not a good Christian. He did not indeed go so far as to maintain, like Toland, that the mind was the offspring of the brain. There is a soul, separate from the body, but the soul is a particular, subtle form of matter, acting upon the brain and acted upon by it. Thought and will and feeling are bodily vibrations set up by the soul. There is no distinction of kind between matter and spirit. God is the cause of all things, and the order of the universe is established by him with the same inexorable necessity as appears in the system of Spinoza. Since God is good, all things are for the best, and the ultimate happiness and perfection of all beings are foreordained.

Priestley. Priestley⁶ was an ardent defender of the Unitarian position, and maintained that the development of Christian theology was a progressive corruption of primitive Christian belief. He also found it not inconsistent with Christian teaching to regard the soul as material, and made a lengthy attack on the idea of spirit, claiming that there is nothing the soul can do which the body cannot be equally well conceived as doing, and that therefore the notion of a spiritual substance is superfluous. God himself is a material being, though his matter is of an unusual and privileged sort. In explaining God's relation to the universe, Priestley made use of the favorite analogy of the Continental deists—the analogy of the watchmaker and the watch. God constructs and winds up the mechanism of the world, which, once created, runs by its own momentum, in a manner determined by its

⁴ *Letters to Serena. Pantheisticon.*

⁵ *Observations on Man, etc.*

⁶ *Disquisitions Relative to Matter and Spirit; The Doctrine of Philosophical Necessity; Free Discussions of the Doctrines of Materialism.*

springs and cogs. Priestley also managed to believe in the immortality of the soul, in spite of his materialistic conception of its nature.

IV. MORAL AND SOCIAL SYSTEMS

Dispute Between the Relativists and the Absolutists. Hartley and Priestley wrote much on ethical and political matters, and bring us back to the most important aspects of eighteenth century British thought. Before, however, mentioning their views, we must turn to the very end of the seventeenth century and name a few of the more important of their predecessors. Generally speaking, we may note at once that the increasing inquiry into moral and social questions was of two sorts. On the one hand, it followed the tendency initiated by Hobbes and later developed by Hume to dispense with *a priori*, absolute and immutable principles of conduct and to derive moral standards from experience and particularly from the basic qualities of pleasure and pain. On the other, it sought to defend such principles and to establish them with the same certainty as attends mathematical truths. This reaffirmation of absolute morality frequently appears as a protest against the empirical tendencies of the age.

Clarke. The deist Clarke, following the reasoning of the Cambridge Platonists, insisted that the propositions governing moral conduct are self-evident and furthermore are capable in themselves of determining human behavior. In other words, knowledge of the good is sufficient to ensure our pursuit of it. We cannot truly know and approve the good and decline to follow it. But, being a theist, Clarke also sought to show that, though morality has a natural foundation in human reason, it has also a supernatural foundation in the will of God and is therefore properly subject not only to human but to divine rewards and punishments.

Cumberland and Shaftesbury. Cumberland⁷ (1632-1718) and Shaftesbury⁸ (1671-1713), on the other hand, were more concerned with establishing morality on a rational and naturalistic basis by dwelling on the instinctive and fundamental character of our altruistic impulses. They were opposed to Hobbes' view that human behavior, so far as it is unselfish, represents a compromise adopted for the express purpose of securing each individual as much self-assertion as the clash and reciprocal limitation of one will by another will permit. Public is not, then, fundamentally opposed to private interest, and the concessions

⁷ *De legibus naturae.*

⁸ *Inquiry Concerning Virtue and Merit.*

the individual makes to others do not involve any essential self-sacrifice. Our moral sense arises from the fact that not only do we naturally love our fellow-beings and express that love in various ways, but we also, by transference, come to love that love itself and to delight in its manifestations—in other words, to love virtue for itself.

Mandeville vs. Butler. This view was adopted by Joseph Butler (1692-1752), who used it as a weapon against the cynicism of Mandeville (1670-1733). Mandeville, in *The Fable of the Bees, or Private Vices Public Benefits*, published in 1724, argued that morality is wholly artificial and is introduced by the political powers—that be to coax or to threaten the vain and silly masses into obedience, and that it is an open question whether its inhibition of the natural passions and desires is really good for society as a whole. To Mandeville and to Hobbes, whom he treats as sharing the same view, Butler opposes the fundamental character of the altruistic impulses and maintains, after the fashion of Aristotle, that pleasure, far from being the end at which moral action is aimed, is the reward accompanying the attainment of the natural goal of human striving—which is happiness. We are, so to speak, wound up to perform certain functions and to pursue certain ends, which we should pursue and perform whether or not pleasure resulted. Those operations bring us satisfaction, or “happiness,” which is different from pleasure. The moral sense, being founded on activity of this sort, has a natural authority. Conscience is the voice of a rational and pondered love of self-fulfillment.⁹

Butler, however, is perhaps most famous for his *Analogy* in which he seeks to defend orthodox Christianity against the Unitarians and the deists. Starting from the basis of “natural religion” as a common ground of agreement, he argues first the necessity of supernatural standards and sanctions of morality and of free-will and moral responsibility, and infers therefrom the necessity of the Christian revelation and of the Incarnation and the Atonement. Given, he says in effect, the theistic assumption of a just and benevolent God, such a being could not have acted otherwise than Christianity reveals him as acting. There is no middle course between Christian theism and atheism. Nor, if we reject the revealed character of the Scriptures, have we any other alternative than the hypothesis that they are a deliberate imposture.

Hutcheson. Hutcheson¹⁰ (1694-1747), who had considerable influence on Hume, follows in Butler’s and Shaftesbury’s footsteps, so

⁹ *Fifteen Sermons.*

¹⁰ *Essays.*

far, at least, as his ethics is concerned. He, too, insists that man is naturally a kindly animal, endowed with good-will towards his fellows, and draws the distinction, later repeated by Hume, between the calm and the violent passions. With the calm emotions, he associates universal benevolence and the moral approbation it excites. He insists against Hobbes that this benevolence is entirely disinterested and unselfish and is exercised, not for the purpose of procuring pleasure, but because it expresses and realizes our nature. Pleasure may, indeed, result from it, as it may result from any natural function, but it is not the end of our altruistic any more than it is the end of our self-centered impulses. Our criterion for judging good actions is double. Their results must be beneficial and their intention benevolent. Beneficial results are to be computed in terms of the greatest good of the greatest number. Here Hutcheson is the forerunner of Bentham and modern "utilitarianism."

Adam Smith. A contemporary and friend of Hume's was the famous economist, Adam Smith (1723-1790), author of the *Wealth of Nations*. But he was also interested in ethics, and his *Theory of Moral Sentiments* is a major contribution to the moral speculation of the period. Like Hume, Smith dispensed with a "moral sense" and regarded "sympathy" as the common element in moral sentiments. Sympathy comes from imagining ourselves in the other person's position, and, being a social emotion, is in itself pleasurable, even when we sympathize with the sorrows of others. Furthermore, when we see one person kind to another, we take pleasure in the kindness of the one party, the pleasure his kindness gives the other, and the sentiment of gratitude felt by the other towards his benefactor. If we can also sympathize with the motives that inspire the friendly deed, and therefore can feel that the gratitude it inspires is proper and well-grounded, we experience a feeling of approval and impute merit to the person and the act that arouse the feeling. The sense of the *propriety* of the situation is the basis of our approval and is present in all judgment that an act is morally good and right.

Sympathy extends still further. In judging our own behavior we endeavor to estimate it as it would appear to an outside, ideal spectator, and in the light of the feelings it would arouse in him and of the approbation he would bestow upon it. It is the judgment of this ideal spectator that constitutes our *conscience*. His voice we come to respect, even as we respect the voices of other persons, and his words of praise or blame give us a sense of inner self-respect or unworthiness,

as the case may be. These words represent general rules of behavior constructed by our feeling of propriety and meritoriousness, and obedience to them is what we call *duty*.

Hartley's Ethics. Meantime, Hartley, whose naturalism we have just been discussing, had published his *Observations on Man*, even before Hume's *Enquiry* had appeared. In it, he proceeded to develop self-interest and sympathy and the moral sense out of pleasure and pain by the laws of association. Upon the fundamental, physical pleasures he erects a hierarchy of higher enjoyments, such as the pleasures of imagination, esthetic pleasure, the intellectual and ethical pleasures engendered by the activities of thought and moral behavior, and finally the pleasures of religious experience.

V. REACTION AGAINST HUME

Price and Reid. The rumpus raised by Hume's skepticism and by his flat denial that moral principles can be either directly intuited or rationally demonstrated led to a reaffirmation of absolutism in ethics. Price¹¹ (1723-1792) reasserted the position taken by the Cambridge Platonists and Clarke that moral verities are self-evident truths, and that right conduct must be motivated by the moral law and is the more meritorious in proportion as it involves a struggle against the natural impulses of our nature.

Reid¹² (1710-1796), also, divided human nature into a rational half and a half composed of habits, appetites, desires, and affections. Against Hume, he argued that reason rather than the natural appetites and desires should decide what ends we ought to pursue, and should devise the means for securing them. Knowledge alone can tell us what is good. To know the good is to desire it. We have an intuition of right and wrong, and this intuition is sufficient to motivate right action. The emotion accompanying such intuition is one of sympathy and benevolence towards good men. In judging our own behavior, it takes the form of an approving or disapproving conscience. Very much the same view was set forth by Reid's disciple, Dugald Stewart (1753-1828).

Besides attacking Hume's ethics, he also combated Hume's intellectual skepticism, which, he felt, was the logical result of the doubts

¹¹ *Review of the Principal Questions in Morals.*

¹² *Enquiry into the Human Mind on the Principles of Common Sense; Essays on the Intellectual Powers of Man; Essays on the Active Powers of the Human Mind.*

thrown by the Cartesians upon the interaction of the mind and the body, and therefore upon the ability of the mind to know an external world—doubts, moreover, that had been further and consistently developed by Locke and Berkeley and carried to their inevitable results by the Scottish thinker. The place to combat them was the place of their origin, and so it is that we find Reid reasserting the validity of the “common-sense” belief that the objects of our experience are not perceptions and ideas but external entities. We do not see visual sensations; our visual sensations are a seeing of objects outside ourselves. We do not know concepts; our concepts are a knowing of external reality.

Impressions and Experiences. Reid puts up little argument for his contention beyond insisting that our belief in an external world is implanted in us by God, and that, if it were not valid, God would not have implanted it in us. He did, however, criticize Hume’s pulverization of the continuity of experience into discrete, unconnected particular impressions and ideas, and maintained that the connections and relations between events are as immediately sensed as the impressions themselves. The mind does not proceed to construct a world out of sense-data by introducing relations among them; the world it first meets is an already constructed world, outfitted with relations and connections, towards which its primitive reaction is not one of perception but one of *judgment* about perceptions. I experience the causal connection between two events just as directly as I experience them. The suggestions which thinking and perceiving carry with them, that there are a thinker and an external object thought about, are just as integral a part of experience as the sense-impressions from which these suggestions emanate. For example, when I perceive an object I am no less sure of my own existence as something more than an experience of it, and of its existence as something more than my experience of it, than I am of the sensations that constitute my *perception* of the object, but do *not* constitute either me or it. In a word, *common sense*, upon which Reid lays great stress, and to which he is always appealing, presents us with a subject experiencing and knowing an object. All the elements of that presentation, subject, object and the perception of the one by the other, are equally trustworthy.

VI. THE REVOLUTIONARIES

Priestley. Priestley, besides attacking orthodox Christianity, was also in revolt against the established social and political order. A disciple

of Rousseau, whom we shall have occasion to discuss in a moment, he was an ardent champion of the natural goodness of mankind and as ardent in denouncing the corruption brought upon it by so-called civilization. He was also well to the fore in the hue and cry of the democratic movement, and got ahead of Bentham in announcing the principle of *laissez-faire*. Inspired by an invincible faith in progress as a panacea for all human ills, he felt that, if men could only be freed from regimentation and planned economic and government control, they would be quick to realize the millennium by means of their released energies and their unhampered goodness of heart.

Paine and Godwin. Priestley was naturally prominent among the liberals in England, who supported the grievances of the American colonies and the propriety of the American Revolution. Along with him were Price and Paine, who later were to share his joy in the revolution in France. Paine has his place, also, as a great atheist, and his *Age of Reason* still ranks as one of the most famous attacks ever made upon orthodox Christianity. Paine was followed by Godwin, Shelley's father-in-law, whose *Inquiry Concerning Political Justice* first appeared in 1793. A spiritual offspring of the French Revolution and the Age of Reason, he carried the revolutionary movement to its extreme conclusions. Philosophically, he turned the tables on both Locke and Hume by subjecting the term "mind," which both of them had used familiarly and uncritically, to the same skeptical analysis that they had applied to substance and personal identity and causation. Minds, he pointed out, no more exist than do bodies or spirits. Just as substance means only the presence of groups of qualities, so mind means nothing but the presence of impressions. The groupings and successions of conscious states are fundamentally the same in all men and follow the law of logical procedure. Hence, we may be called essentially reasonable beings. But rational procedure is obscured and is given a different complexion in different individual streams of consciousness by the influence of environment, social, political, educational, traditional and the like.

Godwin's Anarchism. Therefore, to restore all men to their natural and common rationality, and to enable their conduct to be regulated by reason alone, all these hampering and diversifying influences must be removed. Since, in his opinion, pleasure is indicated as the natural good at which all men aim, all obstacles to its pursuit must be swept away. In removing them Godwin makes almost as clean a sweep of established standards and institutions as did the Cynics and Cyrenaics. Nothing must interfere with the exercise of pure reason. Away, then,

with all irrational sentiments and ties—with filial piety and gratitude and friendship, except as these are justified by the hedonistic calculus. This is not to say, however, that man is naturally altogether selfish. He is naturally altruistic. But his generous emotions must no more be allowed to overstep the bounds set by reason than his selfish ones. Again, general rules and laws are only to be obeyed when they are reasonable. Moral judgments based upon other than coldly rational grounds are of no account. All forms of government have irrational foundations and therefore should be swept away. All laws are pernicious. All coercion is wrong. Reasoning is the only weapon we should ever use with others. All co-operation is silly. Marriage is an unnecessary burden. The possession of property, however, seems reasonable to Godwin, and, on that account, should not be interfered with, in spite of the inequalities it fosters. These inequalities would disappear, like all other evils, if only man could be restored to the sweet reasonableness which is the essence of his nature.

VII. DEFENSE OF ORTHODOX CHRISTIANITY

Paley and His "Evidences." Meantime, orthodox Christianity was not wanting for defenders to protect it against both the Unitarians and the deists, as well as against the atheists. The most famous of them was Paley (1743-1805), who was also a moralist, as well as a theologian. His main argument as given in his *Evidences of Christianity* is based upon design, and is itself obviously designed to protect its readers against the influences of the new discoveries in geology and biology, which were prophetic of the doctrine of evolution and were already casting doubt upon the belief in the fixity and special creation of species and upon the Biblical chronology. The chronology, however, Paley is willing to abandon. As long as we admit that God created the universe, the question of how long ago he created it does not matter. That there is a creator, we infer from the existence of the universe, just as we infer the existence of a watchmaker from a watch. And, just as we infer from the mechanism of the watch the intelligence of its contriver, so we must deduce the wisdom and the power and the goodness of God from the marvelous interadaptation of the parts of the universe, and particularly from the adaptation of biological structures to their functions.

In his moral speculations Paley insists that right conduct is determined by God and that its rewards, like its sanctions, are supernatural. Standards of right and wrong are given both by reason and revelation.

The rational and revealed good is the general happiness of all God's creatures. This happiness can be obtained by the individual only through observing the general laws and cultivating the habits which have been found useful in securing it. Generally speaking, the goodness of human behavior is determined on a utilitarian basis, and thus Paley takes his place with Bentham as one of the founders of utilitarian ethics.

Chapter XII

FRENCH AND ITALIAN ENLIGHTENMENT

I. FRENCH DEISM AND EMPIRICISM

Voltaire. In the Continental Enlightenment, as in eighteenth century British thought, Locke was an important influence. The *Essay* had been published in French in 1700. Voltaire had further popularized him in the *Lettres sur les Anglais* published in 1734, and again some thirty years later in the *Dictionnaire philosophique portatif*. Voltaire (1694-1778) was the most prominent of the French deists and a bitter critic both of orthodox Christianity and of the established political and social institutions of his time. He was a master of irony and satire, and the wit with which his free thinking sizzled made him doubly disagreeable to those whom he attacked and helped raise the temperature of the hot water in which he was forever splashing. His *Candide* mercilessly lampooned the optimism of Leibnitz and ridiculed from every angle its assertion that all is for the best in this, the best of all possible worlds. In *Zadig*, he made fun of the metaphysicians and the moralists, and in *L'Homme aux quarante écus* he paid his respect to the political and social institutions of the day. Also, he was unsparing in satirical attacks upon the Bible. At the same time, he could not go the whole hog with the contemporary French materialists, whom he also castigated, and he clung tenaciously to a deistic type of theism and to its creed of the watch and the watchmaker.

Voltaire's point of contact with philosophy, however, was but one of his many contacts with life. He was a poet, a dramatist, a storyteller, and a historian. The follies and the foibles of the philosophers and the theologians were simply scenes in the great *comédie humaine*, in every incident of which he found something to amuse him and something upon which to exercise his talent for criticism and irony. Every phase of human life was grist for his mill, and human speculation in matters of philosophy and theology was poured into the hopper—and ground exceedingly fine—along with everything else.

Condillac's Derivation of All Ideas from Experience. It remained for Condillac (1715-1780) and Diderot (1713-1784) to translate Locke's skepticism into Gallic fashions of philosophic thinking. Condillac, in his *Traité des sensations*, adopted Locke's view of the mind as a blank tablet upon which the senses write their messages, and Locke's apparatus of memory, association, comparison, differentiation, and abstraction as the means by which complex, universal, and abstract ideas are built up out of sense-perceptions. There is nothing in thought that is not derived from experience and resolvable into it.

To drive this point home, Condillac turned himself into a philosophic Pygmalion and created a statue which he brought to life, still encased, however, within a veneer of marble and sunk as yet in complete unconsciousness. He then chipped away the veneer from the tip of the statue's nose and held a rose to its nostrils. The slumbering statue is awakened by a smell—its first and, for the moment, its only *sensation*. When the rose is removed, the sensation lingers as a *memory*. The memory occupies the entire consciousness of the statue and therefore engages its *attention*. We hold now a little asafetida before the uncovered nostrils. The statue has another experience in addition to the memory of the rose. It *compares* the two, and for the first time discovers by means of the comparison that the smell of the rose is *pleasurable* or *agreeable*, the odor of asafetida *painful* or *disagreeable*. The statue now *loves* the scent of the one and *hopes* and *desires* that it will be repeated; it *hates* the smell of the other and is *averse* to and *fears* a recurrence of the *repugnant* experience. In short, *volition* has come into being within its marble breast. Other odoriferous objects are now placed before it for it to sniff. Its experiences and memories are multiplied and variegated, attended to, compared, discriminated, loved or hated, willed or not willed, according as they are pleasurable or painful. General ideas resting upon resemblances and differences are formed, and judgments of likeness and unlikeness are pronounced. Finally, the carrying over of sensations by memory links them up with present experiences and gives the statue the impression of a single, individual stream of consciousness, that is, of its *self*. The statue is now self-conscious.

In this way Condillac built up an entire mental life out of smells alone. As we chip away the marble from the other sense-organs, experience and the ideas to which it gives rise become more and more complicated. But it is not until we have enabled our statue to receive *touch* sensations that its impressions and ideas can acquire the significance of *objects* existing *outside* itself. The sense of *externality* is

bound up with experiences of size, shape, solidity, extension, and the like. Touch, therefore, is the most important and fundamental of the senses.

Condillac's Skepticism. Condillac, however, shares Locke's skepticism as to the power of the mind to discover the real nature of outer objects. Whether the external world is material as Descartes taught, or composed of unextended monads as Leibnitz claimed, is something we cannot know. Hence, neither of these philosophers, he tells in his *Traité des systèmes*, nor yet the Occasionalists, or Spinoza, have any foundations for their pretensions to certitude or for the systems to which these pretensions lead them. At the same time, Condillac himself feels quite certain that Locke's suggestion is wrong that no sound reasons against the body's thinking can be adduced, and he believes with Descartes that we must regard consciousness as the activity of an immaterial substance. The passivity of the soul, he also feels, may be due to the Fall. Condillac was a priest and an abbé and never allowed his skepticism to trespass upon his theology.

Helvétius' Psychology. Helvétius, like Condillac, tried in his *De l'Esprit*, to show that all the operations and contents of the mind are derived from sense-perception. But he is chiefly interested in this conclusion as a preliminary to the construction of an ethical and political theory. Just as our intellectual processes and ideas are developments of perceptions, so our moral ideals and standards are all developed out of the primitive sensations of pleasure and pain. From these two sources arise all the passions by which the private life of the individual is agitated and motivated. Our feeling of liberty, and here Helvétius closely follows Locke, is a feeling of freedom from outside constraint. As long as we can do what we desire and choose to do, we are free. The question whether we can choose otherwise than we do choose he turns over to the theologians. To attempt to discuss it philosophically would be, he says, like trying to write an essay on causeless effects.

Helvétius' Ethics and Social Theory. The individual is actuated by self-interest, interpreted not economically but in the larger sense of interest in everything he finds agreeable or disagreeable to him. His judgments of good and evil, approbation and disapprobation, are founded upon those impressions. The same is true of society, which is a group of individuals. Social favor and disfavor are therefore dictated by utility, and conduct is deemed virtuous or vicious according as it is useful to society at large. We approve ideas that flatter our self-importance. We disapprove ideas that do not agree with our own, and we

condemn as immoral those who hold them. Altruism is based upon the fact that the sacrifice of private to public interest brings more pleasure and is therefore more useful than its opposite. It is not spontaneous but calculated. Ideas, however, of what is useful and therefore of what is right vary with the times. Hence there is no absolute right and wrong, and all moral standards are relative and changing.

Since we are all actuated by the same passions and we all possess them to about the same degree, all men are naturally alike and naturally equal. Apparent inequalities are due, not to difference of structure, but to differences in ambition, which again depend upon differences of training. Education is therefore all important if the general level of intelligence, which is mediocre, is to be raised, and if humanity is to realize its undeveloped capacities.

Against the established political, social and religious order in France Helvétius inveighed with all the bitterness and something of the irony of his friend and master, Voltaire. Himself a deist, as impatient as Voltaire of theologies and metaphysics, he got into difficulties with the Church, especially with the Jansenists and the Jesuits, and fell into disfavor at court. In spite of his protests and retractions, his book was condemned and burned by the hangman, and he was deprived of a lucrative office he held from the crown. But the notoriety of his case helped make him famous, and turned *De l'Esprit* into one of the best sellers in every country of Europe.

II. FRENCH MATERIALISM

Diderot and De la Mettrie. Diderot, the author of the *Encyclopédie*, gave a distinctly materialist twist to Locke's skepticism. He quite agreed with Locke's view that there could be no *a priori* certainty of the body's not thinking and of the necessity of a soul to explain mental activity; though he seems to have felt that the materialistic hypothesis could not easily account for the unity of experience and for self-consciousness. However, in spite of his avowed skepticism he inclines to a belief in the reality of matter and in the possibility of reducing all things, conscious and animate as well as inanimate, to materialistic and mechanical terms. All mental processes, he insists, are mechanically directed. Our behavior is determined by the kind of machine we are, and our feeling of freedom is an illusion.

Meantime, a thoroughly materialistic point of view was also in process of formulation. Here, too, Locke's skeptical admission that, for all we know, it may be the body that thinks, and that therefore

the concept of a soul is unnecessary, was not without its influence. Of this point of view De la Mettrie (1709-1751) is one of the earliest exponents, best known by his *L'Homme Machine* in which he defends the thesis that the human organism is through and through a mechanism. The differences between the so-called higher and lower forms of life are, he maintained, of degree, not of kind, and consist solely in more or less complex structure. Desire is the mainspring which makes the wheels of all forms of animate being go round, and, the more powerful and the more numerous the wants of an organism are, the "higher" it ranks in the scale. Man, therefore, is the highest of all the animals.

Consciousness is a function of matter and needs no soul to explain it. The body feels and thinks. Mind grows, matures, decays as the body moves along its appointed path from the cradle to the grave. The senses, and here De la Mettrie agrees with Locke and Condillac, are the sources of all our ideas.

When it came to such questions as the existence of God and of immortality, De la Mettrie was silent.

In his preparation of the *Encyclopédie*, Diderot had as an associate the celebrated French mathematician D'Alembert (1717-1783). D'Alembert ranged himself with the deists and impartially attacked both the Jesuits and the Calvinists. His chief interest, however, lay always in mathematics and science, and his part in theological and philosophical controversies was only incidental.

Holbach's Attack on Christianity. Another contributor to the *Encyclopédie* was Holbach (1723-1789), who in *Le Système de la Nature*—a work due in part to the advice and help of Diderot—expounded a system of atheistic materialism. In it, as in a somewhat earlier work, *Christianisme dévoilé*, he denounced not only Christianity but all religion as purveyors of fear and credulity, ignorance and superstition, and found in the idea of God a sanction for tyranny and persecution and oppression and most of the ills to which humanity in general, and the contemporary French nation in particular, were the heirs. Emphatically rejecting the existence of a Deity, he reduced Reality to terms of matter moving in accordance with mechanical principles and laws. There is no such thing as soul or spirit. It is the brain and the nervous system that are conscious, and their activities of sensation and thought are governed by the same necessity as obtains in the rest of nature. Free-will, in the sense of lack of determination, is nonexistent.

Since all events are mechanically determined, purposes are ruled out as explanations. Seeing is not the reason for the existence of the

eye. The ear does not exist in order to hear. Man's whole organic structure is produced by the movements of matter, and the functions it performs are the results, not the explanations, of its organs, which are developed out of antecedent conditions through antecedent causes. We see because we happen to have eyes; we hear because we happen to have ears. Had the movements of matter produced a different sort of organism, our functions and activities would be different from those we possess. Naturally, since we have no souls, we can only be as immortal as our bodies, and our bodies are patently mortal and perishable, like all other individual objects. Matter and motion alone are eternal.

Holbach's Ethics. Holbach's ethics was utilitarian. Happiness is the good after which all men strive and towards which all else, including virtue, is a means. To expect mankind to purchase so-called virtue at the expense of happiness, or to refrain from so-called vice at a price of unhappiness, is worse than useless. Nothing can be truly virtuous that makes for unhappiness. If vice makes a man happy he should pursue it. A sound morality must be scientific, based upon human desires as they are and upon a knowledge of the natural environment in which they operate. Man is naturally motivated by self-interest. It is the business of a rational ethics to enlighten that self-interest, to show man where his true good lies and the means best adapted to attaining it. The superstitious "Thou shalt nots" of religion and all other supernatural sanctions must be swept away, and rational rules must take their place, founded upon an investigation of what really is naturally good and what really is naturally bad for a being endowed with the desires and drives we happen to possess.

Holbach was also in the van of the political revolutionary movement and a trenchant critic of contemporary systems of government. Like Helvétius, he was a champion of the rights of the French masses and had a somewhat dogmatic faith in the power of education and of reason to restore all men to their birthright and to establish their natural equality and dignity.

His honesty and straightforwardness and nobility of personal character commanded great respect and commended him as a friend to many who could not stomach his views. Holbach's atheism, indeed, proved too much for even the tolerance of Voltaire, who rushed to the defense of God and wrote an article about him for the *Encyclopédie*.

Cabanis. Holbach was followed by Cabanis (1757-1808), a French doctor, who drove home the materialistic hypothesis, particularly in so far as it affected man. Starting from Holbach's conclusion that

matter and motion, acting in accordance with mechanical principles, are all that exist, and that human consciousness and behavior are purely natural facts on a par with all others, he developed a thoroughly mechanical and materialistic psychology in an essay on the relations of man's physical organization to his intellectual and moral faculties.¹ In this essay he insists, like Holbach, that it is the body that is conscious and that wills and thinks. The term "soul" is simply a way of expressing the sentient character of the physical organism. It does not designate a separate entity. The brain, he says in a phrase that has become famous, secretes thought as the liver does bile. Or again, the brain reacts to impressions conveyed to it by the sensory nerves just as the stomach reacts to the food we swallow. The one begins to think, when stimulated; the other to digest. Cabanis' own thinking, we may remark, was carried on under circumstances congenial to its mental digestion by others. The French Revolution, in which Cabanis played a considerable part, was in progress. God had been dethroned in France for the time being, and the Goddess of Reason was enjoying her brief interregnum in his stead.

Later, Cabanis seems to have retreated somewhat from his materialism à l'outrance. In his *Lettres sur les causes premières*, not published till some years after his death, he expresses the opinion that life is an infusion into the organism of an immaterial, vitalistic principle, possessed of will and intelligence, which is omnipresent in the world. The indwelling of this principle in us constitutes the self, which is an immaterial entity able to survive the dissolution of the body.

III. THE DAWN OF THE THEORY OF EVOLUTION

Early Evolutionary Suggestions. The biological speculations of the Enlightenment are also colored by the dawn of the theory of evolution. In England, Locke had noted the imperceptible gradations separating man from animals, the animals from vegetable life, and living from inanimate matter. He had also pointed out the arbitrary character of our classification of animal life into genera and species, which, he said, was dictated by our own convenience rather than by the organic lines of differentiation suggested by nature.² And he had explained the structure of the human body as an adaptation of the organism to environment, not, to be sure, evolved, but rather bestowed

¹ *Considérations générales sur l'étude de l'homme et sur les rapports de son organisation physique avec ses facultés intellectuelles et morales.*

² *Essay III*, 6, 22 ff.

by God. Hume, also, had brought forward as a possible alternative hypothesis to special creation the notion that the universe grew into its present shape as an individual organism grows.³

In France these ideas assumed a more definite and a more advanced form. Diderot looked upon matter as a moving, changing, quasi-animate substance whose forms, including animal species, are in a process of generation and transformation no less constant than that of individual objects. He points out, like Locke, the indeterminateness of the boundaries that separate the animate from the inanimate and hints that the one may have developed out of the other. The continuity of human with animal structure was also emphasized by De la Mettrie and Helvétius. Holbach regarded man in his present state as the product of a long evolution from a primitive stock, though he declined to commit himself as to how the first ancestors of the human race originated. These thinkers were at one in excluding all idea of design or purpose from the process of development and transformation and in maintaining the purely mechanical determination of its origin and direction.

Early Precursors of Evolution. Among other early precursors of the evolutionary hypothesis, we may mention De Maillet (1656-1738), Maupertuis (1698-1759), the natural historian Buffon (1707-1788), Robinet (1723-1789), and De Bonnet (1720-1793). Robinet regarded all species, including the human, as variations of a single underlying type. He worked out, moreover, a detailed system of parallelism between mental and physiological processes and even went so far as to locate the moral sense in certain nervous tissues. De Bonnet suggested that the animal and vegetable species existing today are not as God created them in the beginning but have undergone modifications that would render them unrecognizable to their first parents. And as early as 1735 De Maillet had considered the possibility that existing species might be developed out of earlier extinct ones and had insisted upon the importance of the study of geology as a means for reconstructing the past history of the earth.

IV. THE REVOLUTIONARIES

General Revolutionary Atmosphere. We have noted the keen interest taken by the eighteenth century philosophers in political and economic questions and the part many of them played in commend-

³ *Dialogues on Natural Religion.*

ing and advocating the spread of the ideal of democracy, which was then in progress throughout all western Europe. In England the revolution had been to a large extent forestalled by the liberties and rights the British people had already wrung from the crown and the nobility, and its eighteenth century episodes, with the exception of the loss of the British colonies in America, were not marked by violence. But in France, conditions were different. The movement towards democracy was retarded. More had to be accomplished within a briefer space of time, and what had to be done had to be done by violence. Passions were enflamed. Resentment at the contemporary situation ran high and turgid, and its waves, beating against the established order, cast high into the air a foam of idealistic hopes and visions of a human society in which all individuals, freed from the odious tyranny that now oppressed them, should be free, equal, perfect, and happy. French political philosophy reflected the tenseness of the French atmosphere heavy with hatreds and enthusiasms, and, however skeptical it might be in some respects, its faith in the perfectibility of human nature and the future of the human race was unbridled and unbounded.

Montesquieu. There were, to be sure, cooler heads like Montesquieu (1689-1755) whose *Esprit des Lois* is one of the greatest of the French political contributions to the eighteenth century and is remarkable for the sanity and the moderation of its liberal views on politics and religion. Indeed, it was not advanced enough for men like Helvétius and Voltaire, and the friends—among them Helvétius—to whom Montesquieu submitted the manuscript for criticism advised him not to publish it. He ignored their advice, and the book scored an immediate success and acclamation.

Condorcet. Among the more prominent of the enthusiasts we may mention Condorcet (1743-1794), another contributor to Diderot's *Encyclopédie*, and a friend of Voltaire and D'Alembert and of the French economist and minister of finance, Turgot. Condorcet also made valuable contributions to the mathematical theory of probability. But it is upon his *Esquisse d'un tableau historique du progrès de l'esprit humain* that his fame chiefly rests. In this work he sketches the progress of man from primitive barbarism to contemporary times. In human history he finds an advance towards equality between individuals and between nations and towards human perfection. During this advance the chief enemy of progress has always been political and ecclesiastical tyranny, which he believes is about to be overthrown by the exercise of human reason. The moment is at hand when there will be no

more tyrants or slaves or priests, and when all men will be equal and all men will be equally enlightened.

Possibility of Perfecting Human Nature. The present inequality among men rests in his opinion largely upon the uneven distribution of wealth, the advantages bestowed by the inheritance of wealth, and the unequal opportunities and results of education. These inequalities cannot be wholly done away with, since they are rooted in nature and their destruction would violate natural human rights. But they can be diminished by political and educational measures and reduced to the basic inequalities of intelligence and capability, which no means at human disposal can wholly eradicate.

Even so, however, no limit can be set to the perfectibility of human nature, and the measures for further approximating perfection are obvious. The sciences may be improved, both in their exactitude and the extent of their application. Medicine will make enormous strides, both in the prevention of disease and its cure. Indeed, death itself may in the end be the result only of accident or of old age, and the expectancy of life may be so increased as to make man little short of immortal. The practice of eugenics will progressively improve the human stock. Equality of the sexes in all matters will be attained. War will be abolished. Education will be perfected. The fine arts will flourish. A universal language will be invented. Man is on the march upward and onward forever. In contemplating his glorious future the philosopher may well forgive and forget the errors of his past.

V. ROUSSEAU

Character. But of all the political and sociological thinkers of the eighteenth century, Jean Jacques Rousseau (1712-1778) is by far the most important and the most interesting. In character Rousseau was full of contradictions. He was infected with petty meannesses, and fortified with great nobility. He was hard-headed where he should have been soft-hearted, and soft-hearted where he should have been hard-headed. He was emotional, temperamental, sentimental to a high degree, but he was also capable of profound insight and of clear and cool reasoning. His life, too, was characterized by alternating episodes and vicissitudes. Born a Protestant, he embraced Catholicism and reverted to Protestantism again, though at heart he was a typical eighteenth century deist. Very susceptible in a rather namby-pamby way to women, he passed from one mawkish love-affair to another, married, if he really did marry, one woman completely unsuited to him,

lived with her nearly thirty years on and off, and had by her five children, all of whom he left on the doorsteps of foundling asylums and deserted so completely that his descendants have never been traced.

Life. His youth was one of vagabondage, trying his hand at this, that, and the other. From Geneva, where he was born, to Italy, to France, back to Italy, back to France, to England, and back to France again—now reasonably well off, now in dire poverty, now driven by restlessness to the city, now driven back to the country for the consolations of solitude and of the pastoral scene for which he had a sentimental and shallow passion—such was his life. In some of his wanderings, too, he was driven by that bitter persecution with which the established order, be it political, economic, social or religious, greets the appearance of new ideas. Religion was to the fore in this hounding, and Catholics and Calvinists alike were hot upon his trail. But he had also his admirers and supporters, not always sympathetic but at least tolerant, among the more liberal and enlightened men and societies of the time. The English welcomed him, and Frederick the Great, whom he had bitterly attacked, was great enough to extend him asylum in Germany.

Unfortunately, however, he had a genius for quarreling with his friends, for making mountains out of molehills, and for imagining petty and personal animosities to be formidable organized conspiracies directed against him. Among those who were at one time or another his friends or in contact with him, though many of them fell out with him later, were Voltaire, Diderot, the Duke of Luxembourg, the Prince of Conti, D'Alembert, Mirabeau, Hume, Gibbon, Boswell, Prince Henry of Prussia, the brother of Frederick the Great, and George III. But he was too stormy a petrel to avail himself of these safe landings. In spite of his profound longing for solitude and an Arcadian life, it was trouble that he really sought, and trouble that he always found his whole life long.

If we may trust his own account, the ideas that made him famous burst upon him suddenly like a revelation. In the years 1749 and 1752 the Academy at Dijon offered prizes for two essays—the first on the influence of science upon the purification or corruption of manners, or, as we should say, morals, and the second upon the origin of inequality among men and whether it is authorized by natural law. Rousseau saw the first of these competitions advertised in the newspapers, and then and there his revelation took place. In reality there was a long subconscious preparation for the event, for, as we may gather from his *Confessions*, he had been for some time revolving stray questions

connected with political problems. But their eventual eruption into the foreground of his mind was like the unexpected and violent outburst of a volcano. The lava-flow solidified in the two *Discourses*—the first of which won the academic prize.

Civilization a Corruption of Man's Native Goodness. In this *Discourse*, Rousseau set himself squarely against the accepted view of his time, held as we have seen by Condorcet almost as a divinely revealed dogma, that the sciences and the arts foster the progress and are the mainstays of the happiness of mankind. On the contrary, Rousseau argues, it is to them that the real fall of man is due. History shows that the most primitive and the least advanced peoples are the happiest and the least corrupt. Nor is that to be wondered at when we consider the obvious effect of art and science upon human character. They lead to luxury, and luxury to the undermining of all the simple and essential virtues. Furthermore, they breed inequalities among men and distinctions of class and of wealth, which are the root of economic and social evil and the great breeders of human unhappiness—ills that are minimized or altogether absent in primitive societies. Far, then, from being the saviors of mankind, the arts and sciences are the serpents in its original Eden—where ignorance is bliss and the fruits of the tree of knowledge are rightly forbidden us by a wisdom that foresees the disastrous results of tasting them.

In the second *Discourse*, which won honorable mention but not the prize in the Dijon competition, Rousseau elaborated upon the perfection of the state of nature, drew a characteristic picture of the "noble savage," which became all the rage, and then described at length the fall of man. The "noble savage" is not, as Hobbes had maintained, in a state of war. He is naturally social by nature, full of pity for and sympathy with his fellows. Happily exempt from family associations and from romantic love, and casually reproducing his species here and there as the passing desire of the moment dictates, he is free from all the selfishness, the possessiveness, and above all the jealousy which are love's bitter fruits.

This idyllic state, however, was too good to last. Man began to forestall and circumvent nature by inventing tools, and thus his ruin began. Under the new conditions inequalities of talent revealed themselves, the stronger differentiated themselves from the weaker, differences of wealth and poverty arose, sympathy gave way to self-aggrandizement, and the strong and the rich became dominant and organized society as it now exists for the purpose of eternally keeping themselves on top and the poor in servitude.

lived with her nearly thirty years on and off, and had by her five children, all of whom he left on the doorsteps of foundling asylums and deserted so completely that his descendants have never been traced.

Life. His youth was one of vagabondage, trying his hand at this, that, and the other. From Geneva, where he was born, to Italy, to France, back to Italy, back to France, to England, and back to France again—now reasonably well off, now in dire poverty, now driven by restlessness to the city, now driven back to the country for the consolations of solitude and of the pastoral scene for which he had a sentimental and shallow passion—such was his life. In some of his wanderings, too, he was driven by that bitter persecution with which the established order, be it political, economic, social or religious, greets the appearance of new ideas. Religion was to the fore in this hounding, and Catholics and Calvinists alike were hot upon his trail. But he had also his admirers and supporters, not always sympathetic but at least tolerant, among the more liberal and enlightened men and societies of the time. The English welcomed him, and Frederick the Great, whom he had bitterly attacked, was great enough to extend him asylum in Germany.

Unfortunately, however, he had a genius for quarreling with his friends, for making mountains out of molehills, and for imagining petty and personal animosities to be formidable organized conspiracies directed against him. Among those who were at one time or another his friends or in contact with him, though many of them fell out with him later, were Voltaire, Diderot, the Duke of Luxembourg, the Prince of Conti, D'Alembert, Mirabeau, Hume, Gibbon, Boswell, Prince Henry of Prussia, the brother of Frederick the Great, and George III. But he was too stormy a petrel to avail himself of these safe landings. In spite of his profound longing for solitude and an Arcadian life, it was trouble that he really sought, and trouble that he always found his whole life long.

If we may trust his own account, the ideas that made him famous burst upon him suddenly like a revelation. In the years 1749 and 1752 the Academy at Dijon offered prizes for two essays—the first on the influence of science upon the purification or corruption of manners, or, as we should say, morals, and the second upon the origin of inequality among men and whether it is authorized by natural law. Rousseau saw the first of these competitions advertised in the newspapers, and then and there his revelation took place. In reality there was a long subconscious preparation for the event, for, as we may gather from his *Confessions*, he had been for some time revolving stray questions

connected with political problems. But their eventual eruption into the foreground of his mind was like the unexpected and violent outburst of a volcano. The lava-flow solidified in the two *Discourses*—the first of which won the academic prize.

Civilization a Corruption of Man's Native Goodness. In this *Discourse*, Rousseau set himself squarely against the accepted view of his time, held as we have seen by Condorcet almost as a divinely revealed dogma, that the sciences and the arts foster the progress and are the mainstays of the happiness of mankind. On the contrary, Rousseau argues, it is to them that the real fall of man is due. History shows that the most primitive and the least advanced peoples are the happiest and the least corrupt. Nor is that to be wondered at when we consider the obvious effect of art and science upon human character. They lead to luxury, and luxury to the undermining of all the simple and essential virtues. Furthermore, they breed inequalities among men and distinctions of class and of wealth, which are the root of economic and social evil and the great breeders of human unhappiness—ills that are minimized or altogether absent in primitive societies. Far, then, from being the saviors of mankind, the arts and sciences are the serpents in its original Eden—where ignorance is bliss and the fruits of the tree of knowledge are rightly forbidden us by a wisdom that foresees the disastrous results of tasting them.

In the second *Discourse*, which won honorable mention but not the prize in the Dijon competition, Rousseau elaborated upon the perfection of the state of nature, drew a characteristic picture of the "noble savage," which became all the rage, and then described at length the fall of man. The "noble savage" is not, as Hobbes had maintained, in a state of war. He is naturally social by nature, full of pity for and sympathy with his fellows. Happily exempt from family associations and from romantic love, and casually reproducing his species here and there as the passing desire of the moment dictates, he is free from all the selfishness, the possessiveness, and above all the jealousy which are love's bitter fruits.

This idyllic state, however, was too good to last. Man began to forestall and circumvent nature by inventing tools, and thus his ruin began. Under the new conditions inequalities of talent revealed themselves, the stronger differentiated themselves from the weaker, differences of wealth and poverty arose, sympathy gave way to self-aggrandizement, and the strong and the rich became dominant and organized society as it now exists for the purpose of eternally keeping themselves on top and the poor in servitude.

"Le Contrat Social." But the *Discourses* are only a prelude to Rousseau's greatest and most famous work, *Le Contrat Social*. Here we have a discussion of how the development of society *ought* to take place, if it is to minimize the evils of inequality and loss of primitive individual liberty, which inevitably attend its growth. The prime business of all legislation is to preserve liberty and equality—not indeed to an absolute degree, which is impossible—but sufficiently to keep individuals from doing violence to one another by the exercise of their superior powers, and from being able to buy others or being forced to sell themselves to others, because of too great differences of wealth.

Society is founded upon an agreement between individuals who associate for the purpose of offsetting as far as possible the evil consequences of the fall of mankind from its primitive perfection. It rests upon a social contract. But, if this contract is to be effective, there must be power to enforce it lodged somewhere in the body politic. In other words, there must be sovereignty. So far, it will be seen, Rousseau agrees with Hobbes, save that for Hobbes selfishness and the warfare of individual interests are the primitive condition of society, whereas for Rousseau they represent a fall from an original state of peace. The pressing question, then, for Rousseau, as for Hobbes, becomes where sovereignty is to be lodged.

Sovereignty Inalienably Lodged in the People. It is in answering this question that Rousseau lays the basis of the revolution. Hobbes had conceived of sovereignty as not only delegated but absolutely relinquished to a single person, to be exercised by him in the interests of the whole state. Rousseau, however, declared that sovereignty resides in and is inalienable from the people as a whole, and must be exercised by them and by none other if the purposes of the social contract are to be realized. It cannot be divided and portioned out. Law, he continues, is simply the expression of the common will of the sovereign people with regard to matters of common interest. Strictly speaking, the sovereign people should always legislate as a whole and not through elected representatives. Representative government is a curtailment of popular liberty. The only true democracy—or government by the sovereign people—must take the form of the Athenian Ecclesia, or, we might add, of the New England town meeting, where the whole people gathers together and legislates directly. Such government is only possible in a small community, and therefore Rousseau, remembering his Plato and his Aristotle, limits the ideal state to ten thousand individuals.

Government Rests on the Consent of the Governed. But direct action of this sort is impossible in actual fact where states are larger. Therefore the sovereign people establishes a form of government through which it governs itself. But the people is always sovereign, and the power of the governing agent is derived solely from the consent of the governed and may be exercised only for their convenience and in their service. Since the perfect and only really democratic form of government is impracticable in large states, and since the device of representative government by temporarily elected parliaments is excluded by Rousseau as a subterfuge of which he disapproves, the agent can only be a monarchy or an aristocracy. Monarchy has too many disadvantages. Hence the best agent of the sovereign people is an aristocracy; not hereditary—for that, in Rousseau's opinion, is the worst possible governmental agency—but elective. In this way only can the people secure the best possible class of public servants.

But, whatever the governmental agent employed, the moment it ceases to register the will of the sovereign people and begins to arrogate sovereignty to itself it should be overthrown. The right of the people to change the form of government at will, which is the right to revolution, is as inalienable as its sovereignty.

Finally, Rousseau considers the relation of religion to the state. The state will certainly not support nor countenance anything like either Catholic or Protestant Christianity. But it will not only countenance but drastically impose natural religion, or, in other words, belief in God, in immortality, and future rewards and punishments. Unbelievers in these "natural" dogmas will be banished, and apostates from them must be put to death.

Theory of Education. Democracy, then, is the best political device for recapturing the equality, the simplicity, and the straightforwardness that the noble savage, as yet uncorrupted by civilization, spontaneously enjoys. But, if it is to be successful, it must be supplemented by revolutionary changes in the education of the individual. These changes, Rousseau sets forth in his *Emile*, which carries the ideal children, Emile and Sophie, from their own cradles to a cradle that their united efforts are about to rock when their education is at last complete.

Present methods of training Rousseau finds wrong from start to finish. They create an artificial child, instead of permitting and encouraging the noble savage to develop. Infractions of the state of nature begin at birth with swaddling clothes, and are continued in

all sorts of restrictions that tend to cramp and distort the primitive, untrained, unspoiled, unperverted human nature, frank, honest, direct, and unfearing, with which the child is born. Parents, nurses, tutors, schools all conspire in the unholy work of instilling into the child "conditioned reflexes," as we might say, of every undesirable sort—fears, inhibitions, vanities, selfish desires, distorted habits, and false ideas about almost everything.

How then should children be brought up? They should be left as free as possible in all respects. The words "obey" and "command," "duty" and "obligation," should be left out of their vocabularies. Physical obstacles alone should be put in the way of too untrammelled or dangerous self-expression. Punishment, reproof, moral appeals, only harm the child to whom morality is as yet meaningless, and whose impulses are naturally good.

In a word, early education should consist in the greatest possible lack of so-called education. As it is, children will learn evil enough from their parents and imitate the lack of honesty and frankness, the vanity and the selfishness, of their elders. But, if they can only be sufficiently shielded from their parents' vices and from the artificiality of the world during their formative period, they will reach the age of reason, adolescence, and independence, sufficiently fortified by the unhampered development of their native goodness, courage, honesty, and unselfishness to resist the destructive influences of their environment and to cope successfully with life.

Little Sophie's upbringing will not differ from Emile's except as the natural virtues in need of fortification differ in her case somewhat from those of men, and as woman's place in the world needs a different equipment. She is by nature less rational and less intellectual than Emile and therefore at a disadvantage for which she has compensations in her female charm, intuition, and taste. The cultivation of these virtues and of a knowledge of masculine character enables her to dominate men's hearts and thus their actions.

Rousseau's *Emile* had great and immediate influence upon educational theory. It inspired Pestalozzi and Froebel, whose insistence upon the importance of a study of child psychology and the development of the natural activities of the child still motivates much of modern education. And in other ways, it has had important indirect effects.

VI. VICO

While we are still on Latin soil we should mention the Italian and Neapolitan philosopher Vico (1668-1744).⁴ Vico was born and bred a Roman Catholic and always remained a good son of the Church. But his system exhibits great independence of the scholastic tradition. He was a lawyer by profession, greatly interested in the philosophy of jurisprudence, and his devotion to the law colored his general outlook.

Truth Created, Not Discovered, by the Mind. Truth, he tells us, is not something external to the mind. It is not *found* by our own intellectual activities. What we call the process of discovering it, is really a process of manufacturing it. Its fabric is spun, its pattern is planned, its measurements are taken, its shape is determined by the mind whose intellectual activities it suits. In knowing, as in doing, we make things come true, for all knowing is essentially doing, and all the mind can know is what it itself does. For example, in mathematics the mind creates the elements with which it deals, lays down the conditions under which it works, and produces out of these elements, according to these conditions, the edifice of mathematical truth.

God, by actualizing the potentialities of existence he contains and by combining them as he does, at once generates and knows the absolute and flawless truth about the universe—the Word, the Son, and then brings into being out of nothing the truth or fact that a universe exists, and thus creates the world. God's truth is the standard by which we measure the truths created by human minds. These truths are necessarily incomplete, because of the inferior creative power of our intellects. Nevertheless, within the limits set upon that power, our minds in so far as they create coincide with the creative activity of God, and the truths they generate coincide with the absolute truths produced by him. Therefore the truths created by human intellects are not relative and individual but eternal and immutable. Only, since our intellects are finite and restricted in their scope and power of creation, we cannot bring forth complete truth and make for ourselves a knowledge that, being all-inclusive and certain through and through, equals God's.

Certainty Without Knowledge. We can, however, have *certainty* without knowledge, as when we improperly substitute dogmatic certainty of mere opinion for the truth we can and ought to create, or properly supplement with faith truth that it is beyond our power to

⁴ Vico's most famous work is his *Principii di una scienza nuova*.

create. On the certainty that attends erroneous or dubious opinions, there is no need to dwell. Intellectual advance lies in converting certainty of that sort into the certainty that accompanies truth. This we do by testing our opinions with a view to discovering how far they can be really said to have been made by the activity of our minds, and how far they have other causes. An example of the justifiable certainty which may still persist when knowledge is impossible, and truth cannot therefore be created, is the certainty we have of God's existence. Man cannot *know* that God exists. He cannot feel that God's existence is certainly *true*. For to know him would be to create him, and man cannot be the maker of God. But though he cannot *know* him, he may *feel* certain that God exists. No human being, then, can assert the *truth* of God's existence. Only God can do that, and in so doing he creates himself. Human beings are limited to asserting the *certainty* of his existence, since mere assertions of certainty do not *make* truth as assertions of *knowledge* do.

So it is that Vico rejects all attempts like those of Descartes and Spinoza to find the criterion of truth in self-evidence and certainty. The criterion of truth lies in our having made it, as is shown by an examination of the "true" concepts of mathematics and science.

In insisting that absolute truth was generated by God Vico disclaimed the Scottish doctrine that it is the product of an unmotivated and "indifferent" act of the divine will. On the other hand, he was equally unsympathetic to the Thomistic doctrine that God's will was determined by his nature. Both points of view, he felt, distinguished the divine intellect from the divine will, and divided into two what was really one. The intellect and the will were one thing, just as knowing and creating, or willing, the truth were a single activity.

The Creation of the Universe. So much for the process by which God generates eternal and immutable truth. But how does he make a fact and a truth of the universe? In other words, how does he create a material world? In God, Vico replies, exist the powers and possibilities of all things. These powers are actualized as "metaphysical points" of force. The points of force exert themselves and so produce the physical phenomena of extension and motion which are the least common denominators of material existence.

Life, according to Vico, is a purely mechanical event and animals are automata. In man consciousness is added to life in the shape, first, of self-determining impulses to self-expression which work through the mechanical vital principle, and second, of reason, which is God thinking and creating within us.

Theory of Society and History. In generating truth God generates the natural laws by which the physical universe is regulated and the moral law which governs human behavior. He has implanted in human beings conscience, which is an innate sense of justice. Upon conscience and justice all man-made laws are based. Man is naturally and from the beginning a social being. Society is not artificial and not the result of any deliberate compact. The anti-social human being is no longer human. The development of civilization is a progressive clarification of conscience and of man's social nature. The successive stages of history are variations and amplifications of the same law as we find under the most primitive conditions.

History Vico divides into three periods, based upon the expression that law assumes. In the primitive period, law manifests itself as religious authority, customs and usages; in the second period, as authority exerted and regulations formulated by absolute rulers, such as kings and aristocracies. In the third and final period, called civil or human law, it is expressed in authority and legislation resting upon a philosophic understanding of the principles upon which law at all times rests, and from which in all its stages it springs. After coming to maturity, law and civilization decay and relapse to the primitive stage, and then the cycle repeats itself. This scheme of repeated cycles of three stages Vico applies to all the history he is familiar with and especially to the Graeco-Roman period.

Out of his discussion there arises a concept of the philosophy of history. Such a philosophy, if it is to be sound, must be drawn from a knowledge of human nature, since all history is made by man. Naturally, this knowledge must include an acquaintance with the past. But it must do more than that. It must be accompanied by an imaginative ability to put ourselves in the place of primitive peoples and to see whatever period we are studying through the eyes, not of our time and place, but of those who lived in it. Our failure to deal with primitive human life in terms of itself and our tendency to read into it our own sentiments and conditions lead to errors, like the contract theory, for example. If, however, we can see others as they see themselves, we shall find that primitive beliefs and customs are not based upon ignorance and superstition, but are rather a kind of "poetic wisdom" which grasps in its naïve and imaginative way precisely the same truths and principles as more mature civilizations exemplify in a more reflective and sophisticated manner.

Chapter XIII

GERMAN ENLIGHTENMENT

I. LIBERALISM OF THE PRUSSIAN AND AUSTRIAN GOVERNMENTS

Maria Theresa and Joseph II. We cross now into Germany. There too, we find the Enlightenment, or *Aufklärung*, in full swing, though under political auspices different from those that prevailed in France. East of the Rhine the long-drawn-out struggle between Prussia and Austria was in progress, and the opposing figures of its last forty years were Frederick the Great and the great Empress Maria Theresa, whose reigns began in the same year, 1740, and ended with their deaths in 1786 and 1780, respectively. Both rulers, while heading despotic governments, were liberal and humane and instituted many important reforms. Indeed, Maria Theresa's son, the Emperor Joseph II, was almost radical and attempted experiments in social reform inspired by the ideals of the Enlightenment. He did his best to break the power of both the clergy and the nobility. He issued an edict of religious tolerance, and, in spite of a personal visit of protest from the Pope, he closed innumerable monasteries, instituted governmental regulation of those that remained, lifted the heavy hand of Rome from the Austrian priests, devoted the wealth taken from the churches to education, exercised strict control over the relations of the peasantry to their overlords, and abolished serfdom.

Frederick the Great. Frederick the Great, himself a child of the Enlightenment, was exposed from his earliest youth to French influences, which were eagerly welcomed by the native intelligence, broad-mindedness and humanity of his outlook. He was interested in history and philosophy, in art and music. He corresponded with many of the eminent Frenchmen of the day, and was for a long time a friend of Voltaire, with whom he kept in touch both by letters and by frequent visits of the philosopher to his court. Not only did he establish religious liberty, but he tolerated the freest criticism of himself, although it was often bitter and unjust. Rousseau, we may remember, who had violently attacked him, was offered asylum in Germany from the persecution of the French and Swiss authorities. His

government, too, was conducted on enlightened principles. He abolished torture, purified the administration of justice, and was himself always accessible to such of his subjects as had real grievances to lay before him. One of the great generals of all time, he increased the boundaries and established the power of Prussia and made her supreme among the German states and the center of gravity about which the non-Austrian ones were henceforth to circle.

Conditions, then, in Germany were at the moment most favorable to liberal and humane thought. Furthermore, since the greatest of all the German princes was himself on the side of political reform, German thinking was less obsessed by political and social problems and freer to devote itself to science and philosophy.

II. RELIGIOUS LIBERALS

Reimarus. East of the Rhine French deism had its representative in Reimarus (1694-1768), who not only attacked the belief in the special inspiration of the Bible and discredited the alleged miracles it recorded, but rejected the possibility of miracles and of supernatural revelations altogether. God, he maintained, does not use such means to manifest himself to mankind, nor does he choose one religion rather than another for that purpose. The true Scriptures are the book of nature, and to that book all men of all times and places, be they learned or ignorant, barbarian or Greek, Jew or Christian, have always had equal access.

Mendelssohn. Somewhat the same position was maintained by the Jewish thinker, Moses Mendelssohn (1729-1786). He protested, to be sure, against the current materialism, and wrote a dialogue entitled *Phädon*, modeled after Plato's *Phaedo*, to prove the immortality of the soul. This won him the title of the German Socrates. But, when engaged in religious controversy by a contemporary Christian thinker, Lavater, who sought to convert him to Christianity, he replied in his *Jerusalem* that no religion had a monopoly of truth, but that all were true and all were good in proportion as they inspired men to lead the good life. Judged by this standard Judaism was as true as Christianity or any other form of belief, and he was content to adhere to the faith of his fathers.

Lessing. Interesting in themselves as examples of the German *Aufklärung*, both men gain a further importance from their influence on Lessing (1729-1781), who is perhaps the most distinguished German representative of the period of the Enlightenment. He is, it is true,

overshadowed by Goethe, but Goethe, though only twenty years younger, outlived him by fifty years and belongs as much to the first third of the nineteenth as he does to the last part of the eighteenth century.

Lessing was first and last a poet, a dramatist, and an art critic. His earliest interest was in the stage and, with the exception of the *Laokoon* in which he sets forth his theory of art, it is by his dramas that he is known. At the same time, he was a man of wide culture and liberal tendencies, which made it all the easier for two incidents to bring him into the arena of theological controversy and to enlist him as an avowed champion of religious freedom. The first of these incidents was the friendship he struck up with Moses Mendelssohn. The second was the entrusting to him of the manuscript of Reimarus' book, which had not been published during the author's lifetime. Lessing published portions of it in his essays *On History and Literature*, and was roundly taken to task by the orthodox theologians for his impiety in so doing. He replied, and the controversy that ensued was violent and bitter, and ended only when the government of Brunswick, which was less tolerant than the Prussian, suppressed the offending literature at the instigation of the clergy, and shut Lessing up.

Not to be suppressed, however, Lessing took to the drama as a vehicle of self-expression, and, adapting the opinions of his friend Mendelssohn to the stage, wrote his famous play *Nathan der Weise*. In this he tells the famous story of the three rings to illustrate the point that, if it is by their fruits ye shall know them, Christianity, Judaism, and Mohammedanism are all true religions because they have all produced noble and upright men. From now on, Lessing was engaged in ceaseless religious controversy as a constant champion of the liberal cause. He sought to free religion from the fetters of miracle and history and to found it upon a natural and rationalistic basis. He distinguished sharply between the original religion preached by Christ and its later developments. At the same time, he was sympathetic to the doctrines of the Trinity and of eternal life, both of which he regarded not only as basic Christian beliefs but as essentially reasonable in character. In the one he saw a statement of the outgoing and creative nature of God and of the essential divinity of man; in the other, an expression of the truth that the human race is in a state of evolution towards a higher and more perfect state. Upon the concept of development he laid great stress. The universe is in a state of con-

tinuous and progressive evolution, and God is forever revealing himself more and more completely, as the history of religion shows.

III. CLASSICISM VS. ROMANTICISM

Winckelmann. In the *Laokoon*, Lessing lays down the limitations with respect to the subject matter and method of representation imposed upon poetry, on the one hand, and upon painting and sculpture, on the other, by their different natures and situations. Herein he shows the influence of a revival of the Renaissance enthusiasm for antiquity that swept German men of letters in the last half of the eighteenth century. This return to Greece and Rome was led by Winckelmann (1717-1768), a critic and historian of art, whose sojourn in Italy aroused in him a passion not only for the art, but for the whole life and point of view of the ancient world. The perfection of Hellenic art, fostered, like the perfection of the Hellenic intellect, by the ideal conditions under which the Greek lived, lay in its cultus of pure beauty. To Winckelmann, the secret of Greek sculpture lay in its impersonality and its emphasis upon the presentation of ideal and universal types of perfect proportion and balance and harmony, from which all individual idiosyncrasies and variations from type were excluded.

Herder. The joint influence of Winckelmann and Lessing, combined with the lectures of Kant and a reading of Plato and of the British and French philosophers of the Enlightenment, fathered the ideas of Herder (1744-1803), who reacted against the classical revival and allied himself rather with the romantics. He was obsessed by the idea of growth and development and is one of the founders of comparative religion, comparative mythology, and comparative philology. In his philosophy of history, he approaches at moments the Darwinian theory of evolution, though his general point of view is Aristotelian in that he regards the successive stages of animal life, not as successive stages through which humanity has passed in emerging from an animal ancestry, but rather as a ladder of forms of which man has always been the topmost rung. However, he seems to have felt that this ladder represents the animal species that have survived in the struggle for existence and have succeeded in establishing themselves through their superior power of adapting themselves to their environment.

Goethe. Lessing's great "classical" successor was the poet Goethe (1749-1832), in whom an Italian journey aroused much the same enthusiasms as it did in Winckelmann. But Goethe was not untouched

by the romanticism of Rousseau, and he had to carry his classicism through the fire and smoke of the French Revolution and of all the unrest it created in the contemporary world, which Lessing did not live to feel. Like his Faust, he had himself yearned for experience for experience's sake, and had had his spiritual as well as his physical *Wanderjahre*. His classicism in consequence tended to become a romantic ideal for him, to be pursued not so much with a view to attaining it as because without a noble quarry there would be no pleasure and no sense of self-realization in the chase. The real end and justification of life lay in just living, but without objects to live for there could be no life to live.

Goethe also made valuable contributions to the advance of the theory of evolution, though by the time they were published in 1820 the theory had already outgrown them.

IV. FAITH VS. REASON

Hamann and Jacobi. In the meanwhile, skepticism was beginning to give rise in Germany to a faith founded upon a despair of reason. Hamann (1730-1788), for example, revolted against logic and abstraction and took refuge in pietism and mysticism. We must *feel* Reality, in which all logical contradictions are reconciled. The processes of knowledge can never discover God. God can only be found in naïve and childlike belief. Somewhat the same point of view was more elaborately held by Jacobi (1743-1819). He, too, argues that the processes of reason can never demonstrate the existence and nature either of the sensible world or of God. Indeed, the logical conclusions of exact reasoning must, as Spinoza's system admirably shows, be atheistic and fatalistic. The only terms in which we can *understand* the universe are mechanistic and deterministic. Free will, being undetermined by causes, cannot be explained. God, being infinite, cannot be comprehended. For our acquaintance both with the external world and God we must rely upon faith. Sense-perception carries with it a conviction that it represents objects existing outside ourselves. In other words, the senses "reveal" the existence of an external world as an immediate fact which cannot be gainsaid in spite of our inability to prove its truth. So, too, we have a supra-sensible, intellectual feeling or conviction which "reveals" to us God's existence as an immediate fact, although the moment that we try to *demonstrate* the truth of that fact we land in Spinozistic determinism and atheism. The two as-

surances, perceptual and intellectual, of the existence of the objects to which they point are equally trustworthy.

Wolff. There remains one philosopher to be mentioned, significant as the immediate and positive link that connects Kant with previous European philosophy. Moreover, he was the first German metaphysician of the new era, and his philosophy dominated German thought till its place was taken by the Kantian system. This philosopher was Wolff (1679-1754). Wolff was a follower of Leibnitz, with whom he had become acquainted as a young man. In these circumstances he was naturally opposed to the skeptical and empiricist views in process of development in England by Locke and his successors. He held to the doctrine of innate intellectual and moral principles, and believed in the power of reason to attain and demonstrate truths that escape the senses. Furthermore, reasoning, guided especially by the law of self-contradiction, was the only means of reaching Reality, and the demonstrable and rational character of a hypothesis was the sole criterion of its validity.

This rationalism got him into difficulty with the clergy, which at Halle, where he was teaching, was to the fore in the Pietistic revolt against the intellectualism and the dogmatism, as they were then considered, into which Lutheranism had fallen. Religion from this point of view was a matter of the heart rather than of the head, in which the claims of reason were subordinate to those of feeling and emotion, and the revelations vouchsafed the individual in his private devotions counted above any theology that consistent and scientific thinking might produce. For that matter, no one was entitled to be a theologian who had not shared in the Pietistic religious experiences which centered about conviction of sin, repentance, and conversion.

Out of this dominant sense of unworthiness, sin, and alienation from God, the Pietists evoked a morality of a puritanical sort. All forms of amusement, such as games, dancing, theater-going and the like, were condemned as worldly and ungodly. The primitive text of the Bible was taken literally as a guide to life.

Wolff's insistence that theology and morality were based upon reason and that their hypotheses and prescriptions, like those of any other science, must be demonstrated with mathematical exactness, was highly obnoxious to the Pietists. Nor did he gain favor in their eyes by delivering a eulogistic address upon "The Practical Philosophy of the Chinese," and pointing to the ethics of Confucius as testimony to the possibility of constructing a satisfactory ethics upon reason alone, without the aid of divine revelation and the experience of divine grace.

He was indeed so successfully persecuted by the Pietists that in the end he had to leave Halle for a time, and take refuge in Saxony, until he was eventually recalled to his former post by Frederick the Great, and a year or two later was installed as chancellor of the university from which he had been expelled.

Influence of Leibnitz. Wolff's own line of reasoning led him to adopt the system of Leibnitz with considerable modification. From Leibnitz' theory, suggested by the calculus, that the soul-monads and the body-monads differ only in degree, he returned to the old dualism of a difference in kind between mind and matter, echoed in a dualism of sense-experience and intellectual knowledge. In this way Wolff revived for himself the old difficulties of explaining the interaction between mind and body and between the operations of the intellect and the material provided by the senses. This perplexity he dispelled by invoking the Leibnitzian doctrine of pre-established harmony in the somewhat attenuated form of a miraculous arrangement made by God between mind and body and thought and sense. He denied, however, the inner self-sufficiency and self-justification with which Leibnitz had endowed the monads, and maintained that everything was to be explained as a *means* to the furtherance of something outside itself. In accounting for the existence and activity of objects we must look, not for that which might be useful to the thing in question, but for that in it which might be useful to other objects. Man, in his opinion, is the end to which everything else in the universe is the means.

The theory of external uses and the habit of explaining all things as means to human life and happiness pervade his whole system. In nature the inanimate is a means to the animate; the animate is a means for giving the soul a body. Philosophy itself is a means for enlightening the mind, and an enlightened mind is a means to human happiness. The universe is the means by which God reveals himself. Purpose is all pervading. The universe is designed by God and its parts are designed by him to work together. This is the reason why the universe exists and why every minutest event happens as it does. In the divinely regulated order miracles and special revelations may occur; but, if they do, they must be recognizable as part of that order and not as exceptions to it. Such was the philosophy to which Kant was at first addicted.

Chapter XIV

KANT

I. LIFE

Early Education. Immanuel Kant is the great homebody among philosophers. Of Scotch descent, he was born at Königsberg in 1724. He died at Königsberg in 1804. He lived there all his life. Nor during his whole life did he go more than forty miles from the city. He was even less traveled than Socrates, who, except as a soldier, never set foot outside of Athens. His father was a strap-maker, his family of the Pietistic persuasion. His first education was received at a Pietistic school, from which he went on to the University of Königsberg at the age of sixteen. There he had almost entirely to support himself. By the time he was twenty-two, both parents were dead, and, cut off from even such small help as they could afford to give him, he now, along with his three sisters and one brother—the survivors of nine children—had to make his own way as best he could. He was equipped with an excellent knowledge of Latin, less Greek, and a thorough training in mathematics and physics.

The next nine years he picked up a living by tutoring. Then he returned to the university, took his doctorate, and became an instructor, lecturing mainly upon physics. Finally, in 1770 he was appointed professor of logic and mathematics. This post he held till his retirement in 1797—an act inspired by the censorship to which the expression of his religious opinions, which had long since broken with his childhood faith, was subjected by the Pietistic and reactionary successor to Frederick the Great. During the last years of his life his mind appreciably failed.

Character and Habits. The regularity of his life has become a by-word. He never married, and the proverbial setness of a bachelor's ways was reinforced by a methodical temperament. He was awakened at five every morning, and not once in thirty years, his servant testified, did he fail to respond to the call. He worked all the morning and dined promptly at one o'clock at a restaurant, which he varied in order to escape from the sightseers who came to stare at him after

he had become the most noteworthy monument of the town. Every afternoon at four, rain or shine, followed by his manservant carrying an umbrella, he took an hour's walk, so punctually that the citizens of Königsberg, it is said, set their watches by his appearance at the door of his house. On returning, he puttered about till twilight, and then abandoned himself to meditation, gazing abstractedly at the tower of a neighboring church. Every night he went to bed before ten o'clock. Once, some fast-growing poplars in the foreground suddenly blotted the spire from sight, and the construction of the Kantian philosophy, deprived of its ecclesiastical source of inspiration, was temporarily held up till the obliging owner of the trees topped them at Kant's request.

Another mainspring of the clock-like ticking of his life was his anxiety about his health. He was not only a bachelor and excessively methodical, he was also a hypochondriac. He stuck to a prescribed and restricted diet. He was afraid of sweating. He always breathed through his nose, under the impression that nothing invited disease like an open mouth. This fussiness was not altogether foolish. He was delicate, undersized, flat-chested, with one slightly deformed shoulder. He was always a little ailing, but never really ill. Like the proverbial New Englander, he "enjoyed" bad health.

Possessed of all the moral virtues, but not in any way a prig, Kant was a man of somewhat cool affections and of nearly stone-cold esthetic sense. He had little eye for natural beauty and no ear at all for poetry and music. He was, however, a great reader, except, curiously enough, of philosophy. He knew, to be sure, his Voltaire and his Rousseau, and he was well up in contemporary British literature, secular as well as philosophical. But his knowledge of the history of philosophy in general was meager and spotty.

He was keen on geography, and loved to listen to the stories of those who traveled and to gather information from all sources about the four quarters of the globe. Politics, too, attracted him, and books on politics and the newspapers seduced him from his more serious intellectual activities, just as detective stories are said sometimes to beguile the labors of the justices of the Supreme Court. There was also a certain sprightliness in Kant's make-up that gave a sparkle to his wealth of information and helped make him an agreeable conversationalist, ever welcome in the homes of his friends. It also helped make him an admirable lecturer, able to make dry bones live.

Unfortunately, however, there is no sprightliness in his philosophic writings. They are among the driest in the annals of philosophy and

contain the hardest bones to crack. Nevertheless, the Kantian system is one of the great monuments of philosophic achievement. No system in the history of philosophy has had so immediately widespread and profound an effect. The next hundred years were almost completely dominated by it. The most significant philosophy of the nineteenth century was inspired by it, and reveals, beneath the superficial alterations suggested by Kant's successors, its essential structure, fundamentally unchanged. It is safe to say that no one can understand philosophy since Kant unless he knows his Kant.

II. EARLY VIEWS

Influence of Science and Mathematics and of Wolff. Kant's interest in philosophy, however, developed out of an earlier predilection for science and mathematics. His first writings were concerned with physics and astronomy, and his later philosophical works were interspersed with excursions into the field of the physical sciences. Of his scientific works, *A General Natural History and Theory of the Heavens* (1755) is perhaps the most important, though, owing to the failure of the publisher and lack of distribution, it remained almost unknown. In it Kant applies Newtonian principles to the fixed stars, develops a mechanical theory of the whole sidereal universe, and suggests for the first time the nebular hypothesis of the origin of planetary systems. His other scientific writings ranged over such subjects as the action of the tides on slowing up the rotation of the earth, the influence of the earth's rotation upon winds, the causes of earthquakes, the different races of man and the beginnings of human history, the volcanoes on the moon, and the influence of the moon upon the weather. In his discussion of the human race, he had already developed an idea which he never abandoned, that, although the different races of man have developed from a common origin, the human *species*, like all others, is fixed and has not evolved from lower forms of life. At the same time, he speculates whether in certain circumstances the anthropoid apes might not develop human characteristics, and thus, without change of species, attain a quasi-human level of intelligence and culture.

Kant's first philosophic views were those of Wolff, and, through Wolff, of Leibnitz. He was thus predisposed to rationalism and to confidence in the ability of the mind to deal with metaphysical problems. But soon these views were shaken and modified by disturbing influences. The spirit of the Enlightenment and of the Age of Reason,

while reinforcing his rationalism, seems to have undermined the Pietism of his early training and to have converted him from an evangelical Christian into a rationalistic free thinker. But his rationalism in its turn was undermined by the skepticism of Locke and particularly of Hume. He was, as he himself said, roused by the latter from his dogmatic slumbers.

The Influence of the British Empiricists. At the same time, he found himself inclined to be as critical of the British empiricists as they had made him of Wolff and rationalism. He felt that, in spite of their desire to resolve everything into, and derive everything from, experience, they had invented a new metaphysical entity, the *mind*, which underlay and supported experience in much the same way that the spiritual and material substances they rejected supported physical qualities and mental activities. Nay more, they had attributed to mind a highly complex organization that *forced* it to behave in certain ways. It was of the *nature* of mind to perceive, to remember, to associate its impressions along certain lines, and to establish certain relations between them.

The British empiricists, then, had, in Kant's opinion, taken back with one hand what they gave with the other. They might deny innate ideas, but they ascribed to the "mind" innate predispositions to react in certain invariable ways to the experience presented to it by the senses. The mind at birth was not the blank sheet of paper they claimed it was; it was water-marked with a complicated pattern that showed through the moment experience began to write upon it. When scrutinized, the pattern looked strangely familiar. It was ingrained with everything that the empiricists denied of the external world,—with substantiality, and identity, and power, and necessary connection, and all the rest. This water-mark was not stamped upon the mind by experience; it was simply brought out by experience. It was the preliminary condition, not the result, of knowledge. Knowledge, then, was not derived from experience, except in so far as it depended upon experience for its material. It was an *a priori* activity of an entity, called *mind*, which, also, was more than the experience with which it dealt.

Critical Attitude Towards the British Empiricists. To Kant the difficulty in which the empiricists had landed themselves suggested a new idea. Suppose that experience really did have an innate structure which necessarily determined it to perceive, to think, and to feel as it did. In that case its inability to represent the nature of what lay outside it—and here Kant was willing to go the whole hog with the

skeptics—would not necessarily render all truth relative and the conclusions of all science and all reasoning invalid and uncertain. Truth would still be absolute, and reason would be trustworthy, *within the realm of experience*. For, if human thinking had a fixed character, then, in all times and places, whenever and wherever it occurred, and whatever the sense-experience presented to it might be like, it would always obey the same laws, follow the same lines, and construct its world according to the same plan.

Moreover, Kant was inclined to give to our irresistible *belief* in the *existence* of a self and an external world, which was admitted by the empiricists, the same weight as Reid had attributed to it. Even if we could never know what stimulated the mind from the outside and what responded from within to that stimulation, the implication in our thinking that such a stimulus existed, and that there was something which, when stimulated, did the perceiving and the knowing, was as unescapable as the fact of experience itself. The *existence* of a perceiving and knowing *subject*, which provided the *forms* in which experience must appear, and of an *object*, which provided *material* to be experienced in those forms, was a necessary presupposition of the existence of experience and thought. Thus reason will be able to attain *certainty* rather than *probability* in dealing with the data presented to it, and will be able to assert that the content of our consciousness *must* behave as it does and *must* have the structure and the relations it exhibits. Upon these "*musts*" can be securely founded an absolute knowledge and a universally valid science of Reality *as it appears to the human mind*.

Critique of Pure Reason. This would seem to be the central idea amplified by Kant and worked out in great detail in the *Critique of Pure Reason*. His approach to it was gradual, and we can to some extent trace his development from the earlier Wolffian and rationalistic attitude, evinced in his first publications, through the influence of the British School towards his eventual position. This had been partially worked out by 1770, when he published a dissertation on the form and principles of the sensible and intelligible world. The next eleven years were devoted to perfecting it. In 1781 the *Critique of Pure Reason* was published.

Kant describes his philosophy as "*transcendental*." By this he means that he is not concerned with the *content* of experience but only with the *forms* or ways in which the human mind, by virtue of its constitution, is obliged to react, in perception and in thought, to any and every content the touch of an external world may stimulate within it,

whatever the nature of our sense-organs and our sensible experience. These *transcendental* forms of mental activity are also *a priori*. That is, they are not built up from experience or influenced by it, as the British empiricists maintained. On the contrary, existing independently of experience and *prior* to it, they are the agents by which experience is influenced and built up into the shape in which it is presented to us. Our question, then, becomes the problem of enumerating and describing these forms and procedures, and to this task Kant now sets himself.

III. TRANSCENDENTAL ESTHETIC. SPACE AND TIME

Space and Time "a Priori" Forms of Intuition. We begin with sensations as such. Are there, we ask ourselves, ways in which sense-experience, whatever its character and content may be, simply *must* present itself? Yes, answered Kant. No matter what our sense-experience was like, it would necessarily be smeared over *space* and drawn out in *time* by a mind constructed and geared like ours. Its episodes and events, however different they might be from those presented by the sense-organs we actually possess, would still *co-exist side by side* or *come one after another*.

Time and *space*, therefore, are not part of the *stuff* of experience. Neither are they *ideas* derived from experience. They are *a priori* forms of intuition, or, as we should say, of *perception*. Their study is the study of what Kant calls *transcendental esthetic*, using the term "esthetic" in its original Greek meaning of that which pertains to sensation. Space is the form of the *external sense*, or in other words, of our perception of outer objects; time, of the *internal sense*, or of our perception of the flow of our consciousness.

At the same time Kant is careful to point out that space and time are wholly relative to *our* type of mind. Conceivably, beings outfitted with another type might not "intuit" and perceive spatially and temporally, but in some other way. Moreover, since these forms are relative to our kind of mind, we have no right to extend them beyond our experience and to predicate them of the external world. For that matter, there is nothing in sensible experience that can give us any hint of the nature of things as they are in themselves.

The Synthetic Activities of the Perceiving Subject. Just, however, as the fact that there is sensible experience suggests the existence, though it does not reveal the nature, of something external to ourselves, so the spatial and temporal forms in which experience is pre-

sented suggest the existence and the activity of a perceiving subject, though they give us no hint of what that subject is like. Already, in the smeared, successive, spatial and temporal manner of "intuiting" or perceiving, we catch it preparing to unite and join together and *synthesize* sense data and to make of them a single whole.

We may, then, suspect that the prime function of the perceiving and knowing subject is to make *one* consistent world out of the manifold of sense impressions. This suspicion will be confirmed, and the nature and conditions of the activity of synthesizing and unifying will be more completely grasped, by an examination of the operations of *knowledge*, to which we now pass.

It is these operations that give significance to the spatio-temporal content of experience. Our sense-perceptions would remain meaningless unless they were further worked over. On the other hand, without percepts the mind would have nothing to think about, and there would be no *knowledge*. "Thoughts without content are empty, intuitions [perceptions] without concepts are blind. Therefore it is equally necessary to make our concepts sensuous, i.e., to add to them their object in intuition, as it is to make our intuitions intelligible, i.e., to bring them under concepts. These two powers or faculties cannot exchange their functions. The understanding cannot see. The senses cannot think. By their union only can knowledge be produced."¹

IV. TRANSCENDENTAL LOGIC

Transcendental Analytic and Dialectic. The study of the mechanism and operations of the understanding is called by Kant *transcendental logic*. Whatever we are thinking about, be it sensible representations or intelligible concepts, our thought has an *a priori* structure of its own which it expresses in its reasoning. Transcendental logic is the investigation of this structure. It has two divisions, *transcendental analytic* and *transcendental dialectic*. The former is a search for the *a priori* structure of the understanding, and the "principles without which no object can be thought." The latter deals with the tendency of the mind to regard its structure as the structure not only of thought but of external *being*. We believe that the categories by which we unify experience, as, for example, substance and accident, unity and plurality, cause and effect, and interaction, apply also to things as they are in themselves. Because we cannot *think* these things in any

¹ In the discussion that follows the quotations are from *Critique of Pure Reason* (trans. Max Müller, 2nd ed.).

other way we conclude that they cannot *exist* in any other way. To conclude however, that things cannot exist in themselves except as they exist in thought is to fall into illusion, and is to turn logic into a semblance of metaphysics, or, as Kant calls it, a *dialectic*.

This tendency to turn the ways of the mind into metaphysical entities existing outside the mind is reinforced by the fact that we can say beforehand that experience cannot contradict the laws of logic and be *true*. But that does not mean that the laws and categories of correct thinking force all logically true propositions to hold true of experience as well. They may, indeed, be contradicted by experience. For example, the proposition "apples are blue" is, formally and logically, a true proposition. Still, the logical possibility of blue apples does not force us, or even enable us, to grow apples of that color in our orchards.

Although, then, the content of experience must be capable of being logically arranged and cannot exhibit logical self-contradictions, it need not exhibit everything that is logically consistent. What the *stuff* of experience is like can be determined only by consulting experience. But, if the mind cannot even use its categories and laws to determine what the sensible manifold of its experience shall be like, how much less can it use them to determine what the things-in-themselves which provoke this sensible manifold are like! It is the task of *transcendental dialectic* to point out the folly of trying to transform what is true of an object so far as we are concerned into something true of the object as it is apart from us and in itself, and to explain, criticize, and curb the mind's "sophistical illusion" of ability to extend knowledge beyond experience and to know things as they are in themselves.

V. TRANSCENDENTAL ANALYTIC

The Categories of Thought. Let us now proceed to the analysis of the mind's structure undertaken by *transcendental analytic*. The mind's mental activity of synthesizing and unifying experience expresses itself in *judgments* about sense data. These judgments follow certain fixed lines and assume certain fixed forms. We may assert *quantity*, *quality*, *relations*, and *conditions of existence*, or *modality*, of everything that occurs in the sensible manifold. Each one of these four forms of judgment is moreover a trinity. For instance, in asserting quantity we state that what we are dealing with is either *one* or *many*, or one aggregate or *totality* of many constituents. In our qualitative judgments, we make positive (*real*) statements, or *negative* statements,

or cautious, *limited* statements about things. Again, our assertions of relation fall under three heads. We say one thing is the property of another, thus putting the two things in the relation of *substance* and *accident*; or we say one thing is the *cause* or the *effect* of another; or we say that co-existent things act upon and react to one another (*reciprocity* or *community*). Finally, we make statements regarding the conditions or *modality* of a thing's existence. We say "such and such is *possible*; such and such is *impossible*; this *exists* or this does *not exist*; this could not be otherwise and is *necessary*, or this might be otherwise and is therefore *contingent*."

These four trinities, making in all twelve fundamental concepts or Categories, exhaust the entire machinery of syntheses. Everything that occurs in the sensible manifold falls under some one of them. We are *obliged* to think in these terms. But that obligation is not imposed upon us by the content of experience. It expresses *a priori* and *transcendental* necessities of thought inherent in the structure of the knowing apparatus. These ways of thinking are then *pure categories of the understanding*. It is the synthesizing by the Categories of the manifold of sense-experience "intuited" under the forms of space and time that turns it from an irrational and chaotic welter of sensations into an intelligible and orderly world of interrelated objects.

The Necessity of Gearing Sensible with Intellectual Operations. But how does this synthesis take place? The Categories are the source neither of the existence nor the nature of the sensible manifold. The ways in which we understand things are not responsible for there being anything to understand. Nor is the sensible manifold in itself in any way the source of, or responsible for, the intelligible form given it by the mind. How then can the Categories and the sensible manifold ever get together? Where is their meeting-point, and how can they intercommunicate if and where they do meet? To answer these questions we must consider in some detail the unifying operations of the mind. Then, after we have shown how the mind constructs an intelligible and orderly world out of the sensible manifold, we can go on to show up the self-contradictions and errors into which we fall when we seek to bring the Categories into contact with things-in-themselves and to regard the ways in which Reality must appear to us because of the peculiar constitution of our particular type of mind, as ingrained in its nature as well.

VI. UNIFYING OPERATIONS OF THE MIND

The Transformation of Sense-Perception into Objects. The connecting up of the mind machine with the sensible manifold is called by Kant the *Deduction of the Pure Concepts of the Understanding*. If, he says, we examine the sensible manifold we discover at once a fact of fundamental significance. Being given in space and time, experience is not presented in isolated bits. It is given in chunks of co-existent and enduring percepts. In other words, there is no datum of experience that is not a manifold, and that therefore is not a conjoining or, we might say, a *synthesis* of elements. Still, since these syntheses are decomposable into constituent elements and are therefore "constructions" built up out of sensible stuff, they cannot be accounted for by experience itself. They represent a reaching down of the synthetic activity of the mind into experience, and are the results of *apprehension* working on the level of sense-perception.

These sensible syntheses are remembered and associated and imaged, and their recurrence in sense-perception recalls analogous "manifolds" intuited at other times and places. In this way the manifold of sense is transformed into a manifold of "*imagination*" in which invariable sequences and co-existences and other relations now appear. Stable and enduring "images" are abstracted from the procession of appearing and disappearing percepts. *Objects*, or steady and reliable syntheses of experience, are constructed, and are distinguished from haphazard and "subjective" experiences. Since this unifying of sense data into objects has to take place within the frame of space and time, physical objects are represented as *extended*, shaped, impenetrable by one another, etc., or, in other words, as *bodies*. Sense-experience now becomes a sensible *world*. But this *reproduction*, as Kant calls it, of sense-experience by the imagination is not the product of that experience. It is another manifestation of the *a priori* and *transcendental activity of apprehension*.

"The Transcendental Unity of Apperception." Again, in thus unifying the manifold of sense-experience into a single, organized world, the mind is betraying and displaying its own oneness. For only a single, unified mind could recognize its experience as one and the same coherent content of consciousness. This unifying principle binding together consciousness is not derived from experience but is a necessary presupposition of our ability to synthesize the manifold of sense

into an intelligible whole. Kant calls it *the transcendental unity of apperception*.

In unifying all the representations of experience, the subject is also *conscious* of its own unity. In fact, the mind could not make one experience and one world of the manifold of sense-perceptions unless it at the same time were conscious of its own oneness and self-identity. Self-consciousness, therefore, and the consciousness of a unified, intelligible world go together.

However, self-consciousness is not consciousness of that which does the perceiving and the knowing. It is consciousness of that which is known. In the act of self-consciousness the self becomes an object to itself. Therefore, just as I know external objects, not as they are in themselves, but as they are presented to me colored and formed by the kind of mental apparatus I possess, so I know myself, not as I really am in myself, but as I am presented to my real or *transcendental ego*, the knowing subject, after being worked over and reformulated by the machinery of that same apparatus. In short, what the knowing subject is really like in itself is just as unknowable as the real natures of the things it perceives.

We have now partially examined the mechanism by which the mind works over the sensible manifold and makes a world of it. But we are as far as ever from discovering the point of contact and communication between the sensible manifold and the mental processes. These processes must have some affinity with sense-experience in order to get hold of it, and, on the other hand, sense-experience must have some affinity with them that makes of it a stuff with which the mind can work. The search for this affinity now becomes Kant's chief problem.

VII. THE SCHEMATA

The object of his search, Kant finds in space and time. Images, he tells us, like sensible percepts, are presented under the forms of space and time and therefore have a form as well as a content. This purely spatial and temporal form may be abstracted from their particular content. But, taken the other way round, such a form represents the concept of the thing submitted to spatial and temporal conditions. This form is not a *pure* concept since it is still outlined in space and is therefore outlined in a *particular* way. Nevertheless, it is a *general* representation, which holds good, like the concept, for all the objects of a given class. It is *conceptual* because it is a universal, emptied of all particular content, but it is *sensible* because it is an *outline* pre-

sented in space and time. This outline is called by Kant a *schema*, and, hovering as it does midway between the pure concept and the sensible particular by virtue of possessing the characteristics of both, it affords the point of contact and communication between the operations of the intellect and the presentations of sensible experience.

Kant enumerates a few of these *schemata* by way of illustration. The Category of *quantity* appears under the forms of space and time as the schema of *number*, which represents simply "the successive addition of one to one," without taking any account of the particular contents or natures of the units so manipulated. The Category of *reality* is "schematized" by the image of filled time, without reference to what fills it; of *negation* by the image of time thinned out and emptied of content in general, either in part or whole. *Substance* finds its schema in the representation of time as always full notwithstanding the changes that occur in the character of its filling. *Cause* is represented by the invariable successions that occur in the manifold, *reciprocity*, or *community*, by the invariable behavior of the elements of the manifold when occurring together. *Possibility* and *impossibility* appear as the inability of opposites to apply simultaneously, and their ability to apply successively, to the same object. The *necessary* is that which appears at all times.

VIII. ANALYTIC AND SYNTHETIC JUDGMENTS

Universality of Analytic Judgments. Having thus brought the sensible manifold and the Categories of the Understanding into contact, Kant proceeds to a discussion of the activity of judgment, the exercise of which with respect to perceptual experience this contact makes possible. Judgments are of two sorts, *analytic*, which analyze a concept and affirm or deny of it only that which is already contained in or excluded from it; and *synthetic*, which add to a given concept something that is not given or necessarily implied in it.

The truth of an analytic judgment is, Kant tells us, easily determined by the law of self-contradiction. Nothing can be part of the concept of a thing that contradicts that concept, and everything must be true of it that is logically implied by its definition. But absence of self-contradiction does not establish the truth of synthetic as it does that of analytic propositions. The truth of synthetic propositions has to be tested by a further requirement of conformity to the content of experience.

But in that case how can synthetic propositions establish *universal*

truths even within experience itself? All positive truth about experience must apparently be drawn *a posteriori* from an observation of its actual content, whereas the actual content of experience open to our observation is limited and interrupted. No one of us should be able to argue regarding the nature of even the phenomenal world further than his particular experience of it carries him.

Kant attacks the problem as follows. We are agreed that if universal synthetic propositions about experience are true, they must be applicable *a priori* to all *possible* experience that might be presented to the mind. Any so-called law of nature, for example, that is *universally* valid must be applicable, not only to our particular section of space and time, but to *all* phenomena throughout infinite time and space.

The Structure of Experience. Has, then, experience as such any characteristics in the absence of which it would cease to be *experience*? If it has, we can lay down certain conditions of all *possible* experience. Kant thinks that such characteristics exist. Unless experience were *coherent* and *intelligible*, it would relapse into a "meaningless rhapsody of sensations," more *unreal* than dreams and hallucinations, to which the term "experience" would not apply. All possible *experience*, or, at any rate, all possible *real experience*, must be articulated and intelligible.

But what is it that gives coherency and *reality* to experience and therefore makes *real experience* possible? Precisely the same structure as determines how the mind shall think. The possibility of experiencing a world and the possibility of thinking or understanding a world are one and the same possibility. Nothing can be conceived which it is formally impossible to perceive, and conversely nothing can be perceived which it is impossible to form a concept of. Experience, in order to be even *possible*, *must* be so constituted that we are able to assert *a priori* the existence of "things" throughout its entire breadth and length; to know *a priori* that at all times and places things will be before or after, below or above, to the right or the left, of one another; to have *a priori* certainty that they will possess size, shape, number, and sensible qualities which may be predicated of them; that they will have causes and produce effects; and so on and so on. Hence, universal synthetic judgments *a priori* can be made of *all* experience, and may therefore be objectively true, in that they give us real knowledge of how the content of experience, whatever it may be like, *must* be constituted.

IX. NECESSARY CHARACTERISTICS OF ALL POSSIBLE EXPERIENCE

Characteristics of Experience. If now we turn to that content, what are the characteristics that may be universally predicated of it? In the first place, it is *axiomatic* that all experience must be *extensive* in character. It is a totality of co-existent parts or qualities placed side by side, and presented all together at the same moment. Furthermore, any quality of experience may vary in *degree* and intensity. We can therefore have a universally true objective knowledge that in all times and places the content of experience will have not only *extensive* but *intensive* magnitude.

Furthermore both co-extensive and intensive experience are continuous, since any space, however large or small, is divisible into nothing but spaces, and any time, however long or short, is divisible into nothing but times. So, too, *intensive quantity* is continuous, since it is impossible to have in the gradation from presence to absence any gap in which the quality in question is not present, and present to the degree that fits in between the next higher and the next lower amount of intensity. It is this continuity in the combinations of the manifold of phenomena that gives us the idea of a *whole* as contrasted with that of an *aggregate*. A "whole" is produced by the uninterrupted continuation of synthetic activity. An "aggregate" is the result of momentary, repeated acts of combination.

Time is a *permanent* form in which the sensible manifold is presented as successive and changing. Its permanence is experienced as a certain durability in phenomena underlying their alterations in time, or, we might say, as a *substance* which endures, while its *modes* or *accidents* change.

Temporal Sequence Irreversible and Causal. Temporal succession, though it may be conceived or even pictured as reversed, is always *experienced* as irreversible. It *must* be so experienced if experience is to be an orderly and intelligible *experience* and not insanity. Furthermore, a merely higgledy-piggledy succession of events, even if it were never thrown into reverse, could not constitute anything we could call *experience*.

All possible experience must also be so constructed that certain events can only occur in it after others, and that therefore to reach event B, whatever it is, I *must* first pass through event A, whatever it is, and *cannot* reach A by first passing through B. In that case, we can say that A is the *necessary condition* or *cause* of the occurrence

of B. *Causality*, being a form in which any sensible manifold *must* appear to the human mind, will hold true of everything that any human being at any time or place *can* perceive. Portions of our experience, however, can be apprehended in a reversible order and such portions exhibit *co-existence*. Indeed, the condition of co-existence is *ability* to reverse and alter the order in which its parts are presented; just as the condition of causation is *inability* so to do.

Spatial Experiences. Co-existence is as necessary a condition of all possible human experience as sequence and causality, since a sensible manifold in which it was impossible to pass to and fro from part to part would be just as incoherent and crazy as one whose temporal sequences suddenly reversed themselves, and whose events did not *necessarily* always follow one another in the same order. To the one as to the other the term *experience* could not properly be applied.

Furthermore, the elements of the manifold of a sane *experience* must interact, or, as Kant calls it, "commune." Nor can there be any action at a distance. The ties that bind events together must be continuous. Without these interconnecting ties phenomena would fall apart, and our experience of them would not be a continuous passage from one to another, but would occur in disconnected flashes which had nothing to do with one another. Substances, therefore, "must stand in dynamical communion, immediately or mediately, with each other, if their co-existence is to be known in any possible experience." Without *reciprocity* the manifold of sense could not become even stuff for a sensible *world*.

The Conditions of Possible, Real and Necessary Experience. There remain only the *modal* Categories of *possibility*, *reality*, and *necessity* to be considered. To be *possible*, experience must be, first of all, free from self-contradiction. Secondly, it must be consistent with the construction of space, which is a form under which all objective reality and possible *things* must appear.

To assert objective *reality* of a phenomenon, the phenomenon must be *perceptible* as well as conceivable, since "perception, which supplies the material of a concept, is the only characteristic of reality." At the same time, reality may be attributed to things as yet unperceived, provided these possible perceptions "hang together with some other perceptions according to the principles of their empirical connection." Hence "it is possible . . . even before the perception of a thing and . . . in a certain sense, *a priori*, to know its existence." On this fact rests our ability to make valid predictions regarding the future.

We pass now to the modal Category of *necessity*. Although all ob-

jects of possible or real experience are *necessary*, their necessity is determined neither by logic nor by any *a priori* nature of experience itself. Qualities could be combined in substances otherwise than they are, and substances could co-exist otherwise than they do, without running foul of either the law of self-contradiction or the conditions of possible experience. However, the sensible manifold, if it is to be *experience* and not mere madness, *must* have reasons for the particular arrangement and succession of its elements. These reasons are necessitated by *the law of causality*, which forces experience to behave as it does and occur in the sequences and connections we perceive. To be sure, what is the cause of what, and what the effect of what, can only be ascertained by observation. But we can *know* that every event has a cause and will have an effect, for, if things happened without causes and did not produce effects, "there would not even be such a thing as nature." We can, therefore, rule out *a priori* the occurrence both of chance and of "blind" necessity in the world. Everything that happens is *necessary* and that necessity is the condition of *intelligibility*.

Knowledge and Science Based on Experience. Since, then, the human mind has a fixed constitution, which determines what human experience *must* be like in all times and places, nature *must* be uniform throughout, and natural laws must be universally valid. Hence we can make universal synthetic propositions, and hence the *scientific* study of nature as a whole and *scientific* prediction of future events are fruitful and reliable. It goes without saying that science, like all knowledge, cannot transcend experience or make statements about anything but experience. But it can make absolutely and universally true statements about it.

The questions whether the field of possible existence is larger than that of real existence, and the field of real existence larger than that of necessary existence, Kant dismisses as interesting but unimportant. Even if there were other possible, non-spatial and temporal forms of perceiving and forms, other than our Categories, of making experience intelligible, they would be unintelligible to us and could never belong to our experience. We are only concerned with existence as it is for us and there we find the distinctions between the possible, the real, and the necessary largely academic.

X. THE NOUMENA

Noumena and Phenomena Differentiated. We are now confronted with a perplexing idiosyncrasy of thought. Although its Categories re-

ceive all their content from perceptual experience and cannot be extended beyond experience, nevertheless the mind persists in constructing out of experience an order of objects of thought and knowledge which transcends the objects of sense, and is possessed of an intelligible *content*. The mind regards them, not as its thoughts about sensible phenomena, but as non-sensible, intelligible *things* about which it is thinking and to which its concepts apply. Since these intelligible *things* are not presented to empirical or sense-experience, he calls them *noumena*, which is the Greek equivalent for intelligible object, as opposed to *phenomena*, which are given in sense-perception. We have now to ask what is their status and how the mind happens to construct them.

Being concepts of the mind they cannot exist independently of the mind. Nor can they have an *intelligible* content with which the mind is directly acquainted, since the only mental *content* is sense-experience, and all concepts are of sensible things. Nor, again, is there any such thing, in *human* experience, at any rate, as a *non-sensuous perception* or *intuition* of a *non-sensuous* object.

At the same time, the *noumena* are not fictions pure and simple, but have a basis in fact. The *existence* of a manifold of sense-experience *is not* due to the mind, although the *nature* of that manifold *is* derived from our particular kind of sense-organs, our spatial and temporal forms of perception, and the categories in which we think. Hence the mind, recognizing the external *origin* of experience, tends to think that experience itself must exist independently of our sense-perceptions.

Phenomena Conceived as Merely Existent. But independently of those perceptions a phenomenon can only be *conceived* as a bare something, stripped of all sensible qualities, but nevertheless still a *thing* capable of being "intuited" or perceived. Since, however, we can think of such a bare "something," we can *think* of the noumenon as *existent* (which does not mean that it actually exists), in spite of the fact that we can neither perceive nor form any concept of its nature.

Noumena, however, add nothing to our knowledge. They indicate rather the limit to which knowledge can go and where it must stop. All we can know of things-as-they-are-in-themselves is that they *exist*. What they are like *must* remain forever unknown because of those very conditions that make human knowledge possible within the realm of experience. The upshot of the whole matter is that "a real division of objects into phenomena and noumena and of the world into a sensible and intelligible world is . . . quite inadmissible," since

noumena are not objects for thought, and an intelligible world without a sensible content is meaningless.

XI. THE IDEAS OF PURE REASON AND TRANSCENDENTAL DIALECTIC

Existence of Unifying Principles. However, the mind does not accept its limitations and is not content to conceive merely the *existence* of things-in-themselves. It seeks to conceive their *nature*—or, in other words, to fit them into the Categories that determine the ways of its thinking. But these Categories are only applicable to and valid for things, not as they are in themselves, but as they appear to us through sense-experience.

Furthermore, the mind is driven by its nature to synthesize and unify whatever it deals with. Science does this by reducing sensible phenomena to terms of the Categories, and thus *understanding* them. But the mind does not stop here. It attempts to unify into higher all-embracing unities the syntheses introduced by the Categories. In so doing it operates on a new level, above that of understanding—the level, as Kant calls it, of *pure reason*, and the absolute and ultimate unities it tries to establish are termed *Ideas of Pure Reason*.

The Soul, the Universe, and God. Since our world displays three aspects—a thinking and perceiving subject, which perceives and thinks under certain *a priori* forms of intuition and categories of thought; a world of phenomena intuited and known under these forms and categories; and, finally, just the existence of objects of thought in general—reason will strive to introduce absolute unity into each of these factors. So it is that we find reason in search of a *soul*, as the unifying ground of the activities of the mind; of a *universe* of simple indivisible substances causally and reciprocally interconnected, as the unifying ground of phenomena; and of a *Supreme Being* or First Cause as the unifying ground of all thinking subjects and all objects of thought. But such unifying grounds and explanations cannot be found *within* the activities of thought, in the manifold of phenomena or the field of objects in general, of which they are supposed to be the least common denominators. Hence reason, in its work of higher synthesis, tends to project into the realm of things-in-themselves the ultimate unities it tries to produce in experience and tends to regard them as ideas corresponding to ultimate entities *existing outside the realm of experience altogether*.

This projection, however, is even more illegitimate than the tendency of the mind to apply the Categories beyond the realm of sense-

perception. The Categories, at least, are displayed in and supported by the sensible world, but experience exhibits no such unities as reason is endeavoring to establish. On the contrary, the experienced world conspicuously lacks them, and the mere fact that reason *must* try to accomplish these all-embracing syntheses is no guarantee that they actually exist beyond experience. Nor is there any warrant for believing that more unity prevails among things-in-themselves than reason can introduce into the experienced world.

The *Ideas of Pure Reason* are then purely *ideals*, and, recognized as such, they are useful lines along which to proceed in seeking to introduce the maximum unity possible into the work of the Categories on the sensible manifold. But as ideals supposed to be realized outside the sphere of the understanding and of experience in a world of things-in-themselves they are unjustifiable and unfruitful.

The Function of Transcendental Dialectic. It is the business of *transcendental dialectic* to expose the *transcendental illusion* that counterparts of the Ideas of Pure Reason necessarily exist, by pointing out the difficulties and self-contradictions in which this illusion involves us. We begin with the attempt to unify mental activities by means of the Idea of the *soul*. The difficulties in which this Idea lands us are called by Kant the *paralogisms* (or faulty conclusions) of *pure reason*.²

XII. THE PARALOGISMS OF PURE REASON

The Soul as an Immortal Substance. The Idea of the soul is derived from the fact that all experience and thinking, whatever it may be of or about, is *self-conscious*—which gives rise to the hope and the illusion that the *self* can dissociate itself from both its internal and external experiences and the Categories under which it thinks them, and know itself as a separate object, and for what it is in itself. But as we saw, in discussing the *transcendental unity of apperception*, I can only understand myself in terms of the same Categories as enable me to understand all other things. *Self-consciousness* is subject to the *a priori* and necessary conditions of all possible experience. Therefore, I can only know myself as a substance, as simple, as self-identical and personal—a knowledge which suggests to me that I may be immaterial and immortal, and that, as Berkeley maintained, the stuff of the sensible manifold originates *within* the mind. Unfortunately, however, as we also know, such knowledge does not catch the “I” that does the

² Cf. pp. 341-405 (M. M. pp. 279-327).

thinking. It only catches a "me," which is not the "I" as it is in itself, but merely as it must represent itself to itself. None of the Categories can be applied to it as it is in itself.

For instance, the *soul* is not a substance, since "substances" are organizations of "intuited" or perceived sensations. Even if it could be so described, we could come to no conclusions regarding its immortality, since there is nothing in the notion of substance to guarantee permanence and indestructibility. Objects are only verifiably permanent and indestructible for the length of time they happen to endure and survive in the sensible manifold.

Simplicity of the Soul. So too, the *simplicity* of the soul is not given in experience, nor have we any warrant for attributing it, or any other characteristic, to the soul as it *is* in itself. The "unity of apperception" we experience can no more assure us that the soul in itself is simple, than that the external substances apperceived as one and single are so in themselves.

Nor would the "simplicity" of the soul differentiate it in any way from matter. For all we know, matter in itself may be simple. It may be even conscious. All we can say is that the soul is not a body and not spatial. But it does not follow that a distinction exists between soul and body, or between the spatial and the non-spatial, in the world of things-in-themselves.

The Soul as Self-Identical and Personal. The attempt to predicate self-identity and personality of the soul also goes on the rocks. Self-identity is implied in the "unity of apperception," which makes my experience hang together in time, and makes it *my* experience. But I can no more transfer the coherence and identity of my *experience* to the soul than I can transfer to it other experienced qualities. Moreover, such self-identity would be a purely private affair. I could never *demonstrate* it to you or anyone else. But what cannot be demonstrated to anybody else's satisfaction can scarcely be said to be known as true even of all *experience*. There is, then, no way of proving the soul to be self-identical.

Nor is there any way of knowing that the soul is a single person. To be sure, I represent myself to myself as one and the same person from moment to moment. But this representation might conceivably be passed on from one thinking subject to another. There might be momentary thinking subjects, each one of which remembered what the other had experienced. In that case, the content of consciousness might be handed from one to another of a plurality of perceivers, and any one personal self-consciousness might be the child of many fathers.

The Soul and Material Objects. The idealistic argument that the existence of an external world is doubtful is also faulty. The existence of outer objects is no more doubtful than my own existence. Both I myself and the external world are known only as phenomena, not as things-in-themselves. What their existence as things-in-themselves is like we have no means of knowing. Idealism and realism are equally illegitimate as descriptions of things-in-themselves.

Nor can we ever solve the problem of the dependence or independence of the mind on the body, since such a solution would necessitate an extension of knowledge beyond the sphere in which knowledge is possible. This leaves the solution a matter of unsupported faith, but of a faith that conversely cannot be disproved.

So far as the interaction of mind and matter is concerned, the same criticisms hold good. Here, too, the *pros* and *cons* are equally invalid if asserted dogmatically. They both treat of matter in terms, not of a phenomenon, but of a thing-in-itself. Of the nature of the relations of the "I" to other things-in-themselves we can know nothing, assert nothing, and deny nothing. In a word, we have no right to extend to the realm of things-in-themselves the distinction between the ego's representation of itself as a soul and its representation of its other experiences as external bodies. In that realm there may be no dualism.

So much for the impossibility of ever knowing what the soul is really like, and what the real conditions of its existence are. We pass now to the second great illusion of reason, that we can know the real nature of the external, physical world as it is in itself and find its unifying principle. The vanity of this attempt is shown up by what Kant calls the *Antinomies of Pure Reason*.³

XIII. THE ANTINOMIES OF PURE REASON

The First Antinomy. Let us suppose that besides the experience we call an external world, there really *is* an external universe of material "objects." That universe obviously must be conceived as either infinite or finite in time and space. But if we conceive time as infinite, then an infinite past has been *completed* and brought to an end at the present moment. A past, however, that has been brought to an end is finite. Therefore the universe has a past which is both finite and infinite—which is a contradiction in terms. Hence the universe cannot be infinite in time.

Take now its spatial infinity. To be spatially infinite the universe

³ Cf. pp. 426-571 (M. M. pp. 344-363).

must be temporally infinite as well, since an infinite space is a space that takes infinite time to traverse. Hence infinite space is involved in the self-contradiction of infinite time and the universe cannot be spatially infinite.

But a universe limited and finite in space and time is no less self-contradictory, for an absolute beginning to time or end to space would mean that the universe is limited by *nothing*. But limitation by nothing is self-contradictory and inconceivable. Hence the universe *must* be conceived as unlimited and infinite.

The Second Antinomy. The *second Antinomy* is that of the necessity of conceiving "material" objects both as infinitely *divisible* and as compounded ultimately of *indivisible* parts—which is a self-contradiction in thought.

The Third Antinomy. The *third Antinomy* has to do with causation. On the one hand, it is impossible to conceive of any first link in the chain of causation, since the Category of causation forces the mind to think of every event as preceded and explained by another event. On the other hand, we *must* conceive the chain as having a first link, for, if no *first* cause exists, there is no sufficient reason for the causal series, which is left without any ground for occurring as it does.

Again, since a first cause of this sort would be causeless, it would be an inexplicable event, undetermined by another event to exist, to have the nature it has, and to produce the effects it does. It will just occur spontaneously and act *freely*. But how can an event that is absolutely unaccountable and inexplicable in itself be invoked with any consistency to account for other things? An inexplicable explanation is no explanation. It follows that we cannot conceive a causeless or *first* cause standing at the beginning of the series of causes and effects. It is, then, as logically impossible as it is logically necessary to assert its existence.

The Fourth Antinomy. Still, and we come now to the *fourth Antinomy*—there must be some *necessity* for the existence and the particular nature of the phenomenal world—some compelling reason for the presence rather than the absence of this kind of world, or of any world at all. This reason, since there can be no reason for its being otherwise, *must* be what it is.

But the existence of such a reason is inconceivable. If we conceive it as the first link of a causal series, it is open to all the objections, just set forth, to the existence of such a cause. If we can conceive it as the totality of phenomenal existence, we are confronted with the fact that just as any particular event need not logically be what it is, but might

be otherwise, so the totality of events might logically be different from what it is, and is not itself necessary.

Finally, if we try to think of the necessary condition of the existence of a physical world as itself outside the world, we are trying to think the impossible. For, unless the phenomenal universe had been created *at a given time* the creative principle could never have been *outside* the world-process. It would have been always a part of the world-process, a causeless first link of the causal chain. Still, if we suppose the physical universe to have been called 'nto being *at some time* by an *outside* factor, then this factor must have existed *before* the world was, and again becomes a first cause, subject to all the disabilities thereof. A necessary object or event is inconceivable. Hence, with equally good reason, the physical universe both must have and cannot have a reason why it exists and is what it is.

The Solution of the Antinomies. The *Antinomies*, Kant continues, spring from an improper extension of the term "totality" beyond the limits set to its meaning by experience. Totality is not a concept applicable to the phenomenal world. It is one of the guiding ideals into complete conformity with which reason, for all its efforts, can never bring experience. We cannot effect an actual, all-embracing *synthesis* of past, present, and future, since the content of time is a process of accretion to the end of which we never come. Therefore, although we can have an *idea* of totality, we cannot predicate an *existent* wholeness even of the phenomenal order, not to speak of predicating it of things-in-themselves.

Once rid of this mistaken attribution of totality to experience, the *Antinomies* are easily solved. Since the phenomenal world is never complete, we cannot determine whether its totality is limited or unlimited. Nor can we determine from experience whether the parts which go to make up that totality are or are not infinitely divisible. The sensible world is neither finite nor infinite but merely *indefinite* in extent and duration. It is divisible neither into a finite nor an infinite number of parts but simply into an *indeterminable* number of constituents. It exhibits causal connections which determine the time and place of its component events, but its order is also an expression of things as they are in themselves, which is not governed by the Category of physical causation, and may therefore be an expression of a *free* causality interpenetrating the necessary order of physical causation. So, too, the contingent character of the events of experience, no one of which is *logically* implied or necessitated by its antecedents, might

go hand-in-hand with a necessary *logical* determination of the nature and order of these events by the things-in-themselves.

His solution of the *third Antinomy* has, Kant believes, an important bearing upon the problem of human free-will. Man has not only an empirical character; he is also a thing-in-itself. In so far as he is a member of the phenomenal order, his acts, like all natural events, are subject to the laws of causation. But his acts, like all natural events, are also *freely* determined by his nature as a thing-in-itself, or as Kant calls it, by his *intelligible character*.

We can see this *free* causation at work in the way reason deals with the universe. The activities of reason are not determined by the natural order. On the contrary, they seek to conform the natural order to an ideal order which we, as rational beings, feel *ought* to exist. This ceaseless attempt to superimpose our rational ideals on experience does actually modify experience. Without it the phenomenal world could not have the significance it has. Reason does, then seem to introduce something extra and novel into the temporal series. But the modifications it brings about in experience have no antecedent causes in foregoing occurrences. They appear in experience as uncaused events, introduced from the outside into the temporal and causal sequence of phenomena, and determined by the nature of reason alone. Hence the causality of reason appears, in its relation to the temporal and necessary connection of events, as *free* and *undetermined* causation. Why reason determines itself as it does, and has the nature and the ideals it has, is an insoluble problem.

XIV. THE IDEAL OF PURE REASON. GOD

The Existence of God Undemonstrable. We come now to the attempt reason makes to demonstrate the existence and to determine the nature of an ultimate Reality from which both the soul and the universe spring and upon which all things depend. Its ideal is to attain and to comprehend a Supreme Being, a God.

The idea of God Kant calls the *Transcendental Ideal of Pure Reason*.⁴ He calls it an *Ideal* rather than *Idea*, because it transcends Ideas like the soul and the universe, just as they transcend the Categories of The Understanding which apply to experience. Its object is not only beyond experience, but, unlike the existence of the soul and the universe, is not even thought of in terms suggested by experience. On the contrary, it is supposed to exist independently of the conditions under

⁴ Cf. pp. 567-704 (M. M. pp. 459-654).

which experience exists, and is in no wise describable by them. Space and time are not forms of its existence; nor can we confine it within the Categories. It is conceived as the ground of all possible being, and therefore cannot be conceived, as the soul or the universe might be conceived, as capable of non-existence. For how can I make an absolute negation of what I conceive to be the ground of all existence whatsoever, unless I have in my mind the idea of such an absolutely existing being whose very essence is to exist?

So far so good. But there is a great difference between asserting that God cannot be *conceived* except as existing and asserting that because we must *think* of him as existent he must therefore *exist independent of our conception of him*. Once more, we are dealing with an illusion, the greatest of all illusions entertained by pure reason, that the existence of God is demonstrable.

The Ontological Argument. How illusory such a hope is may be shown by an examination of the arguments used by the theologians. Take, for example, the famous "ontological argument" that since the concept of an *ens realissimum*, or all-perfect being, involves the notion of necessary existence, such a being must exist. To this Kant replies that, in the first place, we cannot predicate necessity of anything, even of Reality itself, since the existence of any and every subject together with its predicates can be denied without self-contradiction.

Moreover, all judgments involving existence, Kant continues, are synthetic, and add to the concept something not logically necessitated by it. Hence since the opposite of *any* synthetic judgment is logically possible, and since *any* synthetic judgment can be denied without logical self-contradiction, the proposition "God exists" may be denied without contradiction. There is nothing self-contradictory in saying "God, who must be *defined* as a necessarily existent being, does not necessarily exist."

Furthermore, *existence is not a predicate or a property*. It adds nothing to any concept. It merely determines the relation of the concept to experience. Concepts enacted in the world of experience are concepts of existent objects. The conceived dollar has as many pennies in it as the dollar in my pocket. In or out of circulation, its definition is the same. If putting the dollar in my pocket changed the value of the dollar, then either my idea of the possible dollar is defective and does not define the real dollar, or else the dollar in my pocket is not what I thought a dollar was. In a word, existence is not conceived; it is not an idea. It is perceived; it is an experienced fact.

The Cosmological Argument. The so-called cosmological proof of God's existence, which argues from the existence of the world to a *necessary cause* of the world, improperly argues that the cause *necessarily* exists, and thus identifies it with the *ens realissimum* and exposes it to the objections we have just noted as well as to all the objections against the idea of a first cause. Again, contingency and necessity are valid concepts only *within* the universe. They can be applied to particular objects and events, but not to the existence of the universe as a whole. The fact that there is a world is neither necessary nor contingent. The universe needs no reason for its existence rather than its non-existence, or for being this world rather than that. It is simply there, and is what it is.

Finally, we have the argument from design, which infers from so-called evidences of design the necessity of a supreme designer. At the best, this argument can lead us, not to the concept of an *ens realissimum*, but only to the notion of a kind of architect constructing the world out of matter already on hand. To make God the creator of the matter, as well as of the design, we have to invoke the cosmological proof—with what consequences, we already have seen. Again, we could not even infer from the evidences of design that God was a *perfectly* good workman, but only that he was a very good one. Hence the argument would not even establish his perfection as an architect, let alone his existence.

Finally, even if we could assert the existence of a first cause outside experience, we could never tell whether or not that cause was the supreme explanation of *all* experience, since all experience is not present to us. At the most, we could only say that it was sufficient cause for our experience here and now. Even then, however, we should be extending synthetic propositions beyond the realm of experience, where alone they are valid, and should be pretending to knowledge about things-in-themselves which are unknowable.

In a word, we have no rational proof that the soul, the physical universe, and God are more than ideas and ideals of thought, and that they refer to independently existing objects. The relation of these *transcendental objects* to our thinking is the same as the relation of physical objects to our perceiving. There may or there may not be things-in-themselves corresponding to them. To assert dogmatically the existence of such things lands us in the difficulties we have already recounted.

To be sure, in dealing with the world we act *as if* they were ultimate truths, and except on that assumption all our attempts to intro-

duce unity into the world are meaningless.⁵ And to act *as if* these suppositions were true is to act *as if* the Ideas of Pure Reason were ideas of *existing* objects. Still, even these assumptions cannot go further than the supposition *that* such objects exist. It does not presume to tell us *what* they are like. The nature of God or the soul or the universe is no more indicated by the assumption of their existence, than the nature of things-in-themselves is indicated by the forms in which they are perceived.

XV. TRANSCENDENTAL OBJECTS

"Categorizing" Things-in-Themselves. Kant, we may remember, found it necessary to establish in the manifold of sense points of affinity with the Categories that made it compliant and adaptable to them. These were found in the *Schemata*. The *manifold* nature of sense which enabled us to *enumerate* its parts and to subject them to arithmetical processes, made experience compliant to the Category of *quantity*. The *permanent* and *enduring* character of perceptions gave *substance* to them, and the *invariability* of their observed *sequences* lent itself to the application of the Category of *causality*.

Kant's task is now to find similar go-betweens connecting the Ideas of Pure Reason with the Categories.⁶ For, if the world produced by the union of the Categories with sense-perception were not compliant to the Ideas of Pure Reason, we could never achieve a final unification of the universe through the concepts of the soul, the universe, and God.

However, the difficulty of finding *Schemata* connecting the Categories and the Ideas is quickly overcome. These *Schemata* are found in the nature of the Categories themselves, just as the *Schemata* of sense-perception were found in the nature of experience itself. The Categories, by virtue of their unifying and systematizing power, lend themselves to the further work of unification carried on by the Ideas of Pure Reason. Substance, causality, necessity, and the other Categories are as ingrained in metaphysical speculation as they are in scientific understanding. Hence we find reason in its turn producing a final world of *transcendental objects*, or things-in-themselves conceived in terms of the Categories, just as in the *Schemata* the Categories are perceived not only as general characteristics of sense-experience, but as necessary forms of thinking about sense-experience. These *transcendental objects* in which God, the soul, and the universe are thought of as substances

⁵ Cf. pp. 642-704 (M. M. pp. 576-664).

⁶ Cf. pp. 682 ff. (M. M. pp. 547 ff.).

with properties, and as substances in causal relation, are the *Schemata* of the ideas.

Transcendental Objects. For instance, between the Idea of the soul as an unknowable thing-in-itself underlying our conscious activity and the soul as the ordinary, everyday, "empirical" self given in self-consciousness there intervenes the soul as a *transcendental object*, or *Schema*, freed from any particular content of consciousness, and regarded as an unknown *substance* possessed of unknown *qualities*. Between the Idea of the collection of things-in-themselves that underlie the physical universe and the physical objects constructed by the Categories out of sense-experience, there hovers the *Schema* of the universe, a *transcendental object*, thought of in terms of *substance* and *causation*. Finally, God himself is "*schematized*" as a *substance* with *properties*, whose existence is *necessary* and whose relations to both soul and the universe are *causal*. Nay more, reason represents to itself the nature of the divine substance in terms of its own activities, and thinks of God as a supreme *mind* upon which the rationality and order imputed to things-in-themselves depend, just as the rationality and order of our particular experience depend upon the synthesizing activity of our particular minds.

There are, however, two drawbacks, Kant says, to "schematizing" God as a *mind*. Imputing unlimited wisdom to God tends to make us mentally lazy and prone to refer to it everything we cannot understand, without further attempting to discover things by ourselves. Furthermore, turning the ways in which we are obliged to conceive God into attributes of God himself breeds a perverted, anthropomorphic notion of God as a quasi-human person, whose arbitrary purposes govern the course of natural events. So, instead of investigating the course of phenomena to find out by observation what the aims, if any, of nature are, we judge *a priori* what God's aims are from our own prejudices and preferences, and then twist natural events into conformity with them. Under such circumstances, the Ideas of Pure Reason become hindrances rather than helps to the enlargement of our understanding.

XVI. THE DISCIPLINE OF PURE REASON

Criticism of the Rationalists. Pointing, as it were, a moral to his tale and applying all that has gone before to the tendency of philosophy to indulge in speculations that transcend experience, Kant gives a final word of warning both to the rationalistic philosophers who employ a

priori arguments and methods, and to the empiricists who deny altogether *a priori* principles and derive everything *a posteriori* from experience. Both parties, he thinks, need to be subjected to the *discipline of pure reason*.⁷

The chief trouble with the rationalists, he feels, lies in their admiration for mathematics, and their belief that, like the mathematicians, they can make *a priori* synthetic judgments with absolute certainty and can argue from the particular and the contingent to the universal and the necessary in a way that cannot be refuted. If from the inspection of a single triangle we can infer universal truths which hold for all actual and possible triangles we could ever come across, why, they say, should we not be able to infer the nature of all experience from *our* experience, and demonstrate from it with absolute certainty universally valid *a priori* propositions regarding the nature of the universe?

The trouble is, Kant replies, that philosophy forgets that mathematical axioms and demonstrations rest, not upon the variable and contingent *content* of our experience, but upon the unchanging *forms* of space and time in which *all* human experience is given. Hence mathematics is able to regard each individual representation of its concepts as wholly representative of the concept in question. Thus every individual triangle illustrates the entire nature of triangularity. Any instance of $3 + 3 = 6$, or $3 - 2 = 1$, or $3 \times 3 = 9$, or $\frac{3}{2} = 1\frac{1}{2}$ is symbolic of something that will *necessarily* be true in *all* times and places.

The concepts of philosophy, however, have to take account of the *stuff* that fills in mathematical particulars, and this stuff is variable and contingent and presents individually different *things* in shifting relations to one another. No one physical object or thinking subject is exhaustively representative of *all* objects or *all* minds, as one triangle is exhaustively representative of all triangles. In dealing with her data philosophy has nothing *a priori*, nothing in the way of *necessarily* universal characteristics, to rely upon. For philosophy to have an adequate general concept of the universe in general, and to be able to say the world *is* beyond all doubt such and such, all that ever happened in space and time would have first to be observed.

Hence our philosophic estimates have no demonstrable or *apodictic* certainty, like those of mathematics. There can be no such things as philosophic axioms. Nor can any philosophic arguments be *demonstrations*, since reasoning founded on a changing and accumulating con-

⁷ Cf. *op. cit.*, pp. 709-794 (M. M. pp. 569-637).

tent of experience can never arrive at certainty, as reasoning can that is based upon the unchanging *forms* in which the changing content presents itself.

Criticism of the Empiricists. So much for the rationalists. The empiricists, too, should tread more carefully. Hume, for example, fails to distinguish between the synthetic judgments and concepts that rest upon the content of actual experience, on the one hand, and those, on the other, that are based upon the *a priori* conditions and forms of all possible human experience. He does not see that the concepts of substance and causality, for example, are not built up out of experience, but are ways in which the human mind by its very nature is forced to think of all the experience that may be presented to it. A similar confusion exists in Hume's mind between the provinces of reason and of the understanding. He mixes up the proper claim of the Categories to be valid for all possible human experience with the unjustifiable pretensions of the Ideas of Pure Reason, like the soul and God, to objective counterparts existing outside the world of experience in the realm of things-in-themselves.

The Nature of Legitimate Demonstration. The upshot of it all is that the concepts of philosophy are hypotheses pure and simple, whose function is to explain experience and whose propriety is estimated by their relevance to experience. If they do not stick to the conditions of all possible human experience in their conjectures about possible objects, they become idle fancies.

Legitimate proofs, however, can be made of concepts whose content is given in experience.

For example since *experienced* events always have to be thought of as originating in antecedent occurrences, there *must* be a causal connection between *experienced* events. Hence causation is a demonstrable fact. Or again, although the concepts of substance and attribute do not logically involve each other, in *experience* we cannot find things without qualities, or qualities detached from things. Hence we can demonstrate that substances *must* have attributes, that attributes *must* inhere in substances.

Furthermore these proofs do not rest upon circumstantial evidence. The truths they establish are not demonstrated *provisionally* from accumulating observation of particular events, and subject to the possibility of our finding, either now or in the future, events that contradict them. They are drawn immediately from the constitution of the mind. They are direct, necessary, and leave nothing further to be learned or known about the subject. Since all human experience *must*

fall within the Categories, no experience could ever occur that would disprove them.

The fallacy of the so-called demonstrations of the existence of God lies in the fact that experience presents us with no instance of the idea of either a necessary or a most real being. Therefore, it is impossible to say beforehand whether or not a perceived instance of the concept of a perfect being, i.e., God, would exist necessarily or not.

One last word of caution is necessary, before we leave the subject of proof. We are prone to believe that proving the impossibility of demonstrating the truth of a proposition is proof that the proposition itself is false. This, however, is an unwarranted assumption. The impossibility of demonstrating that a proposition is true does not disprove the truth of the proposition in question. Hence though we cannot prove the existence of the soul, of an objective physical world, and of God, we are just as unable to demonstrate their non-existence.

XVII. GOD, FREEDOM, AND IMMORTALITY AS MORAL POSTULATES

Rationality of Moral Action. But, Kant continues, man's relation to the universe is not wholly intellectual. The world is a stage upon which we *act* as well as scenery which we *observe* and about which we *think*. It arouses desires, hopes, and expectations. Our behavior and our expectations, as well as our thinking, must be reasonable. Here, then, is another fertile field for the exercise of reason.

Now the Ideas of God and the universe and the soul, which are regulative ideas of our thinking, are regulative ideas of our conduct as well. The man who acts rationally is the man who acts *as if* there were a God, *as if* he were an immortal soul, *as if* his soul were free and morally responsible for its choices. In other words, reason imposes upon us obligations with respect to how we shall behave. It not only shows us how we *do* behave, and what *does* take place; it also tells us how we *ought* to behave, and what Reality *ought* to be like.

All our activity as rational beings, Kant continues, is focused upon three questions—What can I know? What should I do? What may I hope? The first question, which deals with the powers and limitations of the mind, has already been answered. The second, which is the practical problem of ethics, is about to engage our attention. The third is both practical and theoretical. We hope for what ought to be, just as we know what is. And just as our knowledge of *what is* leads us to the conclusion that there is an ultimate ground of all existence,

so our knowledge of what *ought to be* leads us to the conclusion that there is an ultimate justification of our hopes.

We hope for happiness. Reason tells us that in order to realize this hope, we must *deserve* happiness. It would be irrational to expect happiness without meriting it. The reasonable conditions of attaining happiness are, then, what we call *moral* conditions. They are not derived empirically from an observation of experience. They are *a priori*. They are a presupposition of moral experience and action. They flow from the nature of reason itself. They render us moral beings inhabiting a moral world.

But plainly *if* the moral law is to be reasonable, and rewards are to be linked with deserts, there must be a moral and rational government of the world. Furthermore, since we do not get what we deserve in this world, there must be another life in which rewards are apportioned to our merits. In short, moral obligation is rational and explicable only on the assumption that we are immortal as well as free, and that there is a God who sees to it that our deserts bear their proper fruits, if not in this world, then beyond the grave. Hence, since moral obligation connotes God, freedom and immortality, whose existence reason cannot deny, we may feel morally, if not intellectually, certain of the being of God and of our own free and deathless nature.

The Categorical Imperative. These propositions set forth by Kant at the end of the *Critique of Pure Reason* were amplified and developed, after some years of further reflection, in the *Metaphysics of Morals*, published in 1785, and in the *Critique of Practical Reason*, published in 1788. In the *Metaphysics*, Kant discusses first what he calls the morality of common sense. He points out that nothing can be called absolutely good, except a good will. Unless the motive behind our action is pure, our behavior cannot be called meritorious and deserving of the reward of happiness. Furthermore, the good will is the only thing whose goodness is not the goodness of a means to some further end, but an end in itself.

To be truly meritorious, Kant goes on, we must act not from *inclination* but from *duty*. What, then, is duty? We can say at once that a dutiful action derives its worth, not from its consequences, but from some general law or principle. It is done because it is right in itself, not because it leads to something beyond itself. Can we, then, state the law of right behavior? We can, Kant replies. The rule of right behavior is always to act in a manner in which we should wish all other people to act. In a word, strictly moral behavior is always founded on a universally applicable maxim.

This maxim, Kant feels, is not derived from experience. As a matter of experience, we find that we are always falling short of our duty. The presence of the ideal, and the sense of *ought* and *duty*, are, therefore, not the product of experience which is not in itself ideal and as we would have it. We have a sense of right and wrong, which we apply to events, as it were, from above, when they occur.

The seat of this sense must be, not in the empirical content of volition, but in the *a priori* structure of the will, which is nothing but reason in action, or, as we might call it, *practical reason*. Since, however, right and rational behavior is hindered by immediate desires and interests in such wise that human conduct is never wholly reasonable and meritorious, the good will is never a realized fact, but appears in experience as an unrealized ideal, accompanied by a sense of the necessity or obligation of realizing it, which commands the will as *imperatively* as the ideals of pure reason coerce our thinking. These imperative commands are of two sorts. They enjoin certain behavior as the necessary means to some further end, or they order us to behave in a certain way because such behavior is an end in itself. In the latter case, we are acting according to what Kant calls the *categorical imperative*, and, since we feel it to be incumbent on everyone to do what is right, simply because it is right so to do, we are following the rule, "*Act as if the maxim of thy action were to become by thy will a universal law of nature.*"⁸

The Universal Rule of Right Behavior. But it is not much use saying *do right* unless we can specify what it is right to do. Is it then possible to discover any one universally and everlastingly right, definite, and concrete kind of action, obligatory upon all men in all times and places, and applicable to all our fellow-beings in spite of their different temperaments, desires, and situations?

Kant answers in the affirmative. Moral behavior is behavior towards other *men*, each one of whom is rational, and finds his good in the conscious realization of his nature as a rational being. Rational beings have a value for themselves, which cannot be measured in terms of the relative value they may have for other people. Recognition in others of the same absolute worth as each one of us finds in himself is the basis of moral behavior and expresses itself in the general rule, or "practical imperative" of so acting "*as to treat humanity, whether in thine own person or in that of any other, in every case as an end*

⁸ *Metaphysics of Morals*, p. 48 (trans. Abbot, Kant's *Theory of Ethics*, 5th ed., p. 39; subsequent quotations from this book are from the same edition).

withal, never as a means only." This is the concrete content of ethical action. This is *what* we should do, and *how* we should act in dealing with our fellow-men, if our behavior is to have a universal and absolute moral value and to be truly good.

This rule of action is not prescribed by our particular preferences, desires, and ends. It is derived, like the categories, from the nature of reason, and is, therefore, *a priori*. To put it in terms of volition, the truly moral or rational will prescribes its own law and its own imperative, with no other end in view than to express its own nature. Its obligation is self-imposed. Hence the moral will is self-determined and self-legislating, or, as Kant calls it, *autonomous*. When, then, we act morally, we are not only citizens of the world, to which, incidentally, considerations of prudence and expediency might better adapt us, but we are citizens of an ideal order, or "kingdom of ends" of which we are both the subjects and the monarchs, obedient in our actions to a law laid down by our own will.

There is no compromising with these ends, nor is there any equivalent for them as there is with the ends that have only an *extrinsic* value dependent on their ability to satisfy human desires. *Moral* action has an intrinsic value, and *dignity* which cannot be traded for a consideration, without depriving us of self-respect. Since the autonomous will is self-legislating and exercises its causality uninfluenced by anything except itself, it is *free*. Its acts occur independently of the causation we find in the phenomenal world. Its law of action, the Categorical Imperative, and the moral behavior inspired by that law, originate in the transcendental self in the world of things-in-themselves. How this intervention of the intelligible self in the current of sensible currents and this introduction of free acts into the linkage of physical cause and effect is possible we cannot know. But we are always behaving *as if* our wills were free and could dictate their choices. And, although human freedom is one of those things that can be neither proved nor disproved by argument, we can at least defend the hypothesis on rational grounds against dogmatic skepticism.

Three years later Kant returned to the charge in the *Critique of Practical Reason*, in which he reiterated and expanded the views advanced in the *Metaphysics of Morals*.⁹

God himself, he now adds, is subject to the moral law. But God is not harassed by alternative courses of action and the necessity of choosing between them. Since he cannot will other than the good, the moral law does not present itself to him as an obligation or duty

⁹ *Critique of Practical Reason*, pp. 126-143 (A. pp. 105-120).

but as a spontaneous rule of action—as, indeed, it would to us, were it not for the conflict between our transcendental and our empirical selves. God's will is therefore above obligation and duty. It is *holy*. We may remark in passing that this holiness of God bears some analogy to *dignity* in man for which no equivalent can be found in the values of this world and upon which no price can be set.¹⁰

Human will, however, is *heteronomous*, as Kant now calls it, or subject to motivation by an object other than the expression of its own nature. Still, no goal save self-expression can *command* the will and put it under an *imperative* obligation. It is not our duty to be happy, but it is our duty to be good. Nay more, it is always within our power to be good, though it is not always within our power to be happy.¹¹

XVIII. THE REALITY OF FREEDOM

Practical reason, we remember, from which moral activity flows, not only assumes the existence of a thing-in-itself, or soul, behind the empirical self. It assures us that this entity is a moral being, witness its self-expression in the moral law, which is not derived from empirical experience and does not belong to the "me," and yet is felt as directly as a color or a sound or any other element of the sensible manifold. We are *conscious* of moral obligation. We *feel* free. We *feel* responsible.

Freedom Is Self-Determination. Can we be sure, however, that our consciousness of possessing a free and responsible character is not an illusion? ¹² As a natural being I am subject to the same determinism as the Category of causation imposes upon all nature. If I am to be free, then, I must be not only *in* the temporal series but *above* it, and must somehow manage to intervene in time from outside time. Can we make any sense of such a situation?

Kant thinks we can.¹³ My acts, he says, may be as completely determined by antecedent causes as any other natural events are. But it must be remembered that the natural order as a whole, and the nature of the entire succession of events appearing in the relation of cause and effect, rest upon a world of things-in-themselves, which condition the sensible world to be the kind of world it is. Therefore, my entire career in time, although each of its moments is the outcome of what

¹⁰ *Op. cit.*, pp. 143-144 (A. pp. 120-121).

¹¹ *Op. cit.*, pp. 146-156 (A. pp. 122-130).

¹² *Op. cit.*, pp. 157-175 (A. pp. 131-147).

¹³ *Op. cit.*, pp. 225 ff. (A. pp. 188 ff.).

has gone before, is also conditioned to be what it is by the *intelligible character* I possess as a thing-in-itself, which expresses itself *freely* in all my actions. If the nature of my real character, laid up among the things-in-themselves, could be known, then all my actions in all circumstances could be absolutely foretold. But I should be none the less free, since my behavior, although absolutely predictable, would still be determined by myself, and would be foretold from a knowledge of *my* nature.

Suppose, however, we object that if we are created by a God our freedom and moral responsibility are thereby destroyed, since God has made us what we are. To this Kant replies that the question of who made us has no bearing on freedom.¹⁴ Although God may be responsible for my existence, it is I who am responsible for how I behave, and it is the latter responsibility alone that has moral significance.

There is, then, nothing self-contradictory or contrary to reason in the idea of a free will expressing itself efficaciously in the deterministic stream of empirical causation and modifying the course of events. It follows that our consciousness of freedom and of the moral law is not necessarily an illusion, even from the point of view of pure reason.

XIX. THE AFFINITY OF THE MORAL LAW AND MORAL CONDUCT

The "Deduction" of the Moral Law. We have now to ask how the moral law, which cannot in any way be inferred from sensible experience and is so frequently opposed to its counsels, can be brought into any working relation to the desires and drives of everyday life. After all, it is these desires and drives that constitute the *content* of moral behavior. Without them the Categorical Imperative would be as void as the Categories of the Understanding would be without the manifold of sense to fill them and to give expression to them.

We see that we are confronted once more with some of the problems that faced us in the *Critique of Pure Reason*. We have, for example, to find some way of establishing a connection between the moral law and its content of everyday behavior, analogous to the so-called *deduction* of the Categories. There must be something corresponding to the *Schema*; some go-between linking moral consciousness and behavior with the *a priori* and transcendental moral law.

In the coincidence, Kant tells us, of the actual feeling of being free and responsible with the undeniable logical possibility that we may actually be what we feel we are, we find the "practical" equivalent of

¹⁴ *Op. cit.*, pp. 232 ff. (A. pp. 194 ff.).

the deduction of the Categories. Just as sense-perception comes already prepared for utilization by the Categories, so the experience of freedom and moral responsibility, once shown to be not necessarily an illusion, can be linked up with a universal and categorically imperative moral law.

The necessary go-between corresponding to the *Schema* Kant finds in a certain *typical* form common to all our moral questionings about how to act in specific circumstances. Since this way of reaction to sensible and particular situations involving moral decisions is universal, we may call it as much a law of *nature* as the temporal continuities, persistences, and sequences of sensible experience. When we ask ourselves off-hand whether an act is good or bad, we are asking whether the act is something *we* are willing to do, irrespective of the number of other people who are doing it.

The empirical test, then, of the absolute *rightness* of an action would be its *universal* applicability to *all* people in *all* situations. Such a test is completely naïve. It is instinctively applied by persons who have never reflected upon moral problems, and who have no inkling of a categorical imperative or of an *a priori* universal moral law.

Here is a universal empirical test of concrete moral behavior in the everyday world, akin to the universal *sensible* characteristics, or *Schemata*, of sense-experience. And here is a common meeting-ground between experience and the *a priori* moral law, akin to the *Schemata* linking the Categories of the Understanding to their sensible content.

The "Transcendental Object" of Practical Reason. Practical reason is also analogous to speculative reason in that it has a transcendental object.¹⁵ Just as our thinking about the world is governed by the ideas of God, the soul, and the universe, so our moral behavior in the world is governed by the idea of the *good*. Again, just as God, and the soul, and the real universe underlying phenomena, cannot be *known* in any of the terms provided by the sensible manifold or by the Categories, so the nature of the good is not determined by experience. It is, as Kant has already pointed out in the *Metaphysics of Morals*, the good will, expressing itself in the moral law.

Kant now proceeds to expatiate upon the moral sentiment of respect.¹⁶ Our truly moral acts, he says, are often performed against our inclinations and produce disagreeable feelings in us. At the same time, they arouse our self-respect, which is the only truly moral sentiment. This sentiment of self-respect, being a subjective, empirical feeling,

¹⁵ *Op. cit.*, pp. 176 ff. (A. pp. 148 ff.).

¹⁶ *Op. cit.*, pp. 195 ff. (A. pp. 164 ff.).

gives the moral law a subjective, sentimental validity in addition to its objective, rational authority over our behavior.

Moreover, since respect is an emotion, it has the same driving power as the other emotions. It thus provides a motive for right action which is as empirically felt and as urgent as pleasure and pain, and it creates in us an *interest* which may go hand-in-hand with them. And, since self-respect *feels good*, it is a feeling that can be desired and loved. Hence duty is not grim. Respect for the moral law may also be *love* of the moral law. In fact, if we are not to be merely and grimly virtuous, we must love the moral law as well as respect and obey it. If we love the good then we are not only virtuous but holy, even as God is holy.

Still, to fallible beings like ourselves such love is a counsel of perfection. No human being can be expected to *love* doing right unreservedly and under all circumstances. Any human being who pretends that all his actions proceed from pure goodness of heart and are dictated by sheer love of humanity is a hypocrite and a fanatic.

XX. THE MORAL ANTINOMY

Happiness and Virtue. Finally, to complete the analogy between the active and moral side of our nature and its intellectual, thinking aspect, we discover that practical reason, like pure reason, has its Antinomies.¹⁷ The moral good contains two elements. It involves *virtue*, or action in accordance with the moral law, on the one hand, and *happiness*, on the other. Virtue and happiness, however, do not logically involve each other.

Nor, in the world of experience, do we find any *causal* connection between them. Only too obviously, in this world at least, the righteous are cast down and the wicked flourish. The virtuous are not happy, and the happy are not virtuous. At the same time our moral nature demands that there should be a *necessary* connection between virtue and happiness, reward and merit. We feel it morally *obligatory* that virtue should be rewarded and rewarded in proportion to merit. Nay more, happiness is not the effect of moral behavior. Nor can it be the *cause* of it, since action inspired by any motive except the pure rightness or wrongness of the deed in question is not completely moral.

We are then confronted with the Antinomy that there both *must* and *cannot* be a *necessary* causal connection between virtue and happiness. In short, the attempt to make a thing-in-itself of the moral law

¹⁷ *Op. cit.*, pp. 246 ff. (A. pp. 206 ff.).

is seemingly as self-contradictory as the attempt to make a thing-in-itself of the soul, the universe, or God. Can we resolve this Antinomy? Kant thinks we can.

The Solution of the Antinomy. In the first place, there is nothing self-contradictory in the idea that we can attain complete happiness. Virtuous behavior, however disagreeable it may be from some points of view, is accompanied by a feeling of self-approbation and self-respect, which *contents* us and which motivates behavior much as prospective pleasure does. To be sure, this contentment is never complete or unbroken, or attained and maintained without a moral struggle. However, we can imagine—in God, for example—a *contentment* which is not contrasted with and assailed by worldly desires and pleasures, but is maintained and enjoyed without effort. The divine felicity or *bliss* accompanies a spontaneous, continuous and complete identification of the divine will with the moral law. Hence perfect happiness is a conceivable and possible *experience*, and perfect virtue might conceivably and possibly be rewarded by it.

Furthermore, though, morally speaking, human beings do not, and because of their fallibility cannot, *justly* enjoy perfect happiness in this life, they might conceivably perfect themselves and make themselves worthy of enjoying complete felicity, if they had more time and opportunity to do so than is afforded them here below. Indeed to attain this complete accord between the will and the moral law, which is the necessary condition to a *deserved* complete felicity, an infinite progress towards perfection is necessary and such progress requires an endless duration of our personality.

The Moral Necessity of Assuming God, Freedom and Immortality. Provided, then, that we can assume immortality, we can see how the identification of virtue with happiness, necessary to the solution of the antinomy, is not only logically but empirically possible. But to convert this possibility into an actuality something more than ourselves is necessary. Since observance and love of the moral law are plainly not rewarded by happiness in this world, we are obviously incapable by our own efforts of creating a world in which this blessed event occurs. We can only do our best to further the moral order, and, indeed, it is part of the moral order that we should endeavor to promote it. But if the moral ideal is to be practicable, and if our effort to attain it is to have any chance of success and any meaning, there must be a principle that guarantees the possibility of our realizing it and that provides us with the infinite time necessary for its realization. In other words, there must be a God in whom the ideal after which we strive

has actual existence, and who is able to create a universe in which we, also, in due time may be able to attain it and to partake of his holiness and bliss as the just reward of our merits.

On the assumption, then, that God, freedom, and immortality are facts, we can solve the moral Antinomy. Without them, it cannot be solved and morality remains without explanation, and the moral order is paradoxical and self-contradictory. In a word their *possible* existence, which reason permits us to assume, is transformed by the exigencies of our moral nature into real existence.

Kant, however, hastens to point out that it is not our *duty* to postulate their existence.¹⁸ In other words, there is nothing *immoral* about disbelieving in God, freedom, and immortality. Duty and morality oblige us only to do our best to promote a connection between happiness and virtue and to deal justly with our fellow-men, even though we feel that in the universe in which we find ourselves our efforts can never be crowned with complete success. The assumption that, thanks to God, freedom, and immortality, our obedience to the moral law, has a cosmic meaning and justification, can never be more than a matter of individual *faith*.

Kant brings his *Critique of Practical Reason* to an end with a warning that we must not regard the practical necessity of assuming God, freedom, and immortality as in any way a theoretic or metaphysical argument in favor of their existence. From the point of view of metaphysics the question remains wide-open. Nor can we learn anything about the *nature* of God, freedom, and immortality, from the fact that their existence is a necessary *moral* postulate. To be sure, conceived in the interests of practical reason, God is *thought of* as an omniscient, omnipotent, and beneficent willing and thinking being, but these notions of the divine nature, which fit our moral needs, in no way constitute a *knowledge* of what God is really like.

XXI. THE ESTHETIC SENSE ("CRITIQUE OF JUDGMENT")

The Nature of Beauty. The true and the good are now disposed of. The beautiful alone remains to be considered. Kant tackles it in the *Critique of Judgment*, published in 1790.¹⁹ Our judgments of *taste*, which distinguish the beautiful from the non-beautiful, are not, Kant tells us, logical or objective in character. They do not add to our un-

¹⁸ *Op. cit.*, pp. 290 ff. (A. pp. 242 ff.).

¹⁹ The references to and quotations from this volume are from the translation by J. H. Bernard, London, 1892.

derstanding or enlarge our knowledge of objects. Nor have they anything to do with the moral judgments we pass upon things. They deal merely with a certain sort of interest and satisfaction my representations arouse *within me*. That is, their content is *subjective*. Furthermore, the interest that provokes them is distinguishable from every other interest, and, if they are to be valid, must be kept unadulterated. The moment that I allow moral prejudices, or practical needs, or intellectual considerations, to influence my estimate of a work of art, my judgment is not a purely esthetic judgment, but is clouded by irrelevant elements. "We must not be in the least prejudiced in favor of the existence of things, but be quite indifferent in this respect, in order to play the judge in things of taste." In short, the satisfaction we take in beauty is a *disinterested* satisfaction. We like the beautiful object, not because it procures us further sensuous gratifications, or excites moral approbation, or increases our knowledge, but simply because its immediate presence pleases us in itself.

At the same time, although esthetic satisfaction is subjective, we attribute to it a *universality* that we do not attribute to other purely subjective feelings. The pleasure, for example, that we take in a certain dish or a certain wine we should not dream of imputing to everybody. But if I consider a picture or a statue *beautiful*, I expect you to share the pleasure I take in it and to agree with me as to its beauty. And yet I cannot exactly say that you *ought* to agree with me, as I could, were I inviting your attention to some scientific concept I considered true, or to some moral concept I considered good. Here, then, we have something that is at once purely subjective and yet universal, and something that is *universal* and yet not a *concept* or general idea of anything, but a *feeling* pure and simple. How can this be?

Beauty a Satisfaction not Striven for, Common to All. We can best answer this question by further examining the nature of the universal "feel" of beauty common to all those who experience it. In the presence of the beautiful object we have a sense of "purposiveness," as Kant calls it. Our will comes to rest just as it does when we have finished a good dinner or have accomplished something we *wished* to do. Beauty is, therefore, a satisfaction and fulfillment of the *will*. Nevertheless, it is impossible to discover any sense of unfulfilled desire or specific and conscious purpose that the sense of beauty satisfies. When we come upon loveliness, we have not wished or willed or purposed anything, in spite of our feeling that a demand of our will has been pacified. Our state of mind, then, is a consciousness of "purposiveness" without consciousness of purpose; a state associated with

willing, and yet a state to which volition has not contributed, and in which desire and aim have played no part. This paradoxical feeling of fulfilled purpose in which no purpose has been fulfilled constitutes the universal element in beauty.

The disinterested, impractical, contemplative sense of beauty is not built up out of repeated experiences of beautiful objects, any more than the Category of causation is derived from repeated sequences of events. Like that Category it is *a priori*. Another mark of its universal and *a priori* character is the sense of necessity connected with it. The *pleasant* actually and as a matter of fact excites pleasure. "But the *beautiful* we think of as having a *necessary* reference to satisfaction." It *must* satisfy. This necessity, however, is not grounded either in the sensible content or in the intelligible form of experience. It must, then, be a purely subjective necessity, which we can only describe and talk about by saying that we all possess a common sensitiveness to whose authority we can appeal in judging that this or that object *is* beautiful, and that this sensitiveness is, therefore, a possible source of esthetic pleasure to all men in all times and places. That some people do not get esthetic satisfaction from an object we feel to be beautiful is, we say, a reflection, not upon its beauty, but upon their sensitiveness.

"Free" vs. "Dependent" Beauty. The charm and the emotional appeal of objects adjudged beautiful are not part of their beauty and vitiate any esthetic judgment they are allowed to influence. Nor has beauty anything to do with the *perfection* of an object. Perfection in an object implies realization by it of a specific form or ideal to which it should or does conform. The feeling of perfection, arising as it does from the object's fulfilling specifications laid down beforehand, is not the same as the feeling of beauty which "presupposes no concept of what the object ought to be."

At the same time, judgments of perfection may be accompanied by judgments of beauty that in a way depend upon them. The appeal, for example, a human being or a building makes to the esthetic sense is inseparable from our concept of the specific form or purpose a man or a church or a house *ought* to embody. Beauty so conditioned is called by Kant "dependent beauty." Such beauty is not "free," and our appreciation of it is not entirely and strictly esthetic. "Free beauty" is unadulterated with awareness of any purpose whatsoever. An instance of it is the beauty of flowers. The judgment that they are beautiful is a pure esthetic judgment into which no extraneous considerations enter.

Again, the moment we try to construct a standard or ideal of beauty by which to judge, we are fettering our esthetic judgments with non-esthetic conditions. "An Ideal of beautiful flowers, of a beautiful piece of furniture, of a beautiful view," or, in other words, of free beauty, "is inconceivable." No less so is an ideal "of a beauty dependent on definite purposes, e.g., of a beautiful dwellinghouse, a beautiful tree, a beautiful garden," whose justification and therefore whose "dependent beauty" lie in subservience to some external end.

The Sublime. The *sublime* is like the beautiful in that it is pleasant in itself and that the satisfaction it brings is neither intellectual, moral, nor sensual, but *sui generis*. The feeling of sublimity, however, is connected with boundlessness, whereas the feeling of beauty is connected with form and proportion.

Again, whereas the sense of beauty is disinterested, the feeling of sublimity positively defies and violates our sensible and imaginative interests. It overwhelms us with a size and might that neither our senses nor our imaginations can cope with. It agitates the will instead of pacifying it, as beauty does.

In short it is a sort of imaginative transcription of the idea of infinity. Since nature does not present us with experiences of infinity, natural objects cannot be said to be in themselves sublime. In themselves they are only beautiful. Their sublimity is imputed to them by the notion of infinity, also aroused in us by the more terrible, the more interminable, and the more chaotic and the more desolate aspects of the natural scene.

Finally, in the presence of the sublime we experience both pain and pleasure at the same time. The sublime makes us feel at once big and little. It fills us with awe at the vanity of our attempts to withstand the irresistible forces of nature. In a word, it *humiliates* our sensible and finite nature. Nevertheless, we should not feel this sense of abasement and of awe unless our reason was able to entertain the *idea* of the totality of existence, and to compute the infinite. The very essence of the sublime lies in its contrasting of the inability of sense and imagination with the ability of reason to cope with it, and, at the same time transmuting our pain at the powerlessness of the imagination to picture the ideas entertained by reason into a pleasure engendered by the feeling of the power and the majesty of our higher selves.

XXII. THE "DEDUCTION" OF ESTHETIC EXPERIENCE

No "Deduction" of the Sublime Possible. The *feelings* of beauty and sublimity, being *a priori*, must have, like the *Ideas*, the *Categories*, and the *Categorical Imperative*, a *deduction* that finds something in the nature of experience itself already congenial to their universal and necessary application to sensible phenomenon. For the sublime no such deduction is possible, since sublimity is, properly speaking, not referable to natural objects in themselves, which are always formed and finite, but arises rather from our power to entertain ideas that the sensible world is inadequate to represent. Still, this inability of the sense and the imagination to picture ideas that the mind can entertain is as universal as the *Schema* of sense-experience. Therefore, it affords the same support to universal and necessary judgments of sublimity.

Beauty Involves a "Universal" Judgment About "Particular" Objects. Beauty, however, which, unlike sublimity, is referred to external objects and not merely to our feelings, requires a real and more complicated deduction. In its case, we have to find something in the *positive* content of *experience* corresponding to the universal *a priori* validity and necessity of our esthetic judgments. This validity and this necessity, it will be noted, unlike the judgments expressive of the Categories of the Understanding, does not hold good for *all*, but only for *single* objects. For example, although I can declare beforehand that *all* flowers, past, present and future, *must* be substances possessed of qualities, and *must* have causes, I can only declare *a priori* that *this particular* flower, given here and now in my experience, *must* be beautiful for all other experiences as well. To state that *all* flowers are beautiful would not be an esthetic but a *logical* judgment, and a judgment moreover that could neither be made beforehand, like the judgment that all things *must* have causes, nor be verified by experience.

In a word, there is no *objective* principle of beauty in the sense that there is an objective principle of causation. The principle of beauty is *subjective*. It lies not in any claim that I can make upon all *objects*, but upon a claim I can make of all *subjects* in the presence of a given particular object. I cannot demand of all flowers that they shall be beautiful, but I can demand of all men that they shall find beauty in this individual flower.

The "Sense" of Beauty a Basis for Universal Esthetic Judgments. What, then, is there in esthetic *experience* that exhibits an affinity to this peculiarity of esthetic judgments? Kant finds the answer in the

ability of the beautiful object to satisfy the will without having aroused any previous desire or purpose calling for satisfaction. This indicates that sense and imagination are able to present their content spontaneously and freely, already conformed to the law and order which the mind seeks through the Categories to impose upon the sensible manifold. In short, the beauty of sense-experience is a kind of spontaneous and innate *rationality* exhibited without their aid or intervention. Since every rational being is capable of recognizing and deriving pleasure from this "free," "uncategorized" exhibition of rationality in sensible representations, we may properly demand of him that he feel it when we feel it. Hence we may assert that judgments of taste express universal rules of judgment and are valid for everyone.

We are entitled, Kant thinks, to assume the existence of a communicable, common esthetic sensibility as part of the common sensitiveness, or "common sense," which enables us to communicate sensations of any sort to one another. It is as much a part of the *a priori* structure of the mind as the Categories or the Ideas, and the judgments founded upon it have the same authority as those pronounced by the understanding or by reason. Only, whereas the understanding and the reason create a common and communicable world by imputing *objectivity* to phenomena, esthetic taste creates it by imputing to each one of us the common *subjective* thrill and satisfaction felt by all of us in their presence.

As a matter of fact, esthetic satisfaction is rarely experienced in a pure state. Ordinarily it is mixed up with the social feeling of the necessity of actually communicating it to other people. Esthetic judgment also is prejudiced by considerations of propriety, as, for example, by the discovery that what we took to be a natural flower is an artificial one, or by moral or intellectual interests, or by charm.

XXIII. ART AND THE ARTIST

Artificial vs. Natural Beauty. So far, Kant has been only considering the beauty of nature. Now he takes up the beauty of artificial objects and the subject of art. Art, to be true art, must avoid all appearance of purpose and aim at giving the same sense of "purposiveness without purpose" as pleases us in the natural object.

To be able to do this and avoid the appearance of art is a mark of *genius* on the part of the artist. Artistic genius is an original capacity which produces spontaneously, and without consciousness of the origin of its ideas. Its works, while sufficiently true to nature as not to be

nonsense, are not merely imitative of nature, but set up standards of taste and rules of esthetic judgment valid for other people. Artistic genius is, then, the creative counterpart of the receptive faculty of esthetic taste. It can produce what people with a sense of beauty are able to appreciate.

Kant sums up the difference between natural and artificial beauty by saying that the one "is a *beautiful thing*," the other "a *beautiful representation* of a thing." It follows that, whereas in order to judge of natural beauty I need not have beforehand a concept of what sort of thing the object is to be, I must know what the artist is trying to portray.

In the production of beauty art has one paradoxical advantage over nature. Nature cannot make a thing both beautiful and ugly at the same time. But "beautiful art shows its superiority in this, that it describes as beautiful things which may be in nature ugly or displeasing. There is only one kind of ugliness which cannot be represented in accordance with nature, without destroying all esthetical satisfaction and consequently artificial beauty; *viz.*, that which excites disgust."

The creative genius of the artist has always to be checked by the esthetic taste he shares with his public, if the beauty of his work is to be communicable to others. He must be a spectator as well as a creator. He must also combine imagination with understanding. He gives to concepts and ideas, which the understanding uses only as instruments of knowledge, an added aura and iridescence of subjective value common to all men possessed of taste.

In doing this, the artist, in so far as he is a genius, sees something new in things, which has never been seen before. His vision is free and spontaneous, undetermined by anything except himself, and its result is unique and not to be reduplicated. His work cannot be successfully copied or imitated by other geniuses, but it may be an inspiration to the exercise of their originality.

The Hierarchy of the Arts. Of all the arts, Kant ranks poetry highest because of its superior power of expanding "the mind by setting the Imagination at liberty." After poetry comes music. "For, although it speaks by means of mere sensations without concepts, and so does not, like poetry, leave anything over for reflection, it yet moves the mind in a greater variety of ways and more intensely, though only transitorily." It is the language of the heart. Its mathematical structure is, as it were, its grammar, but "in the charm and mental movement produced by music, mathematics has certainly not the slightest share." For this reason, from a cultural point of view, in which appeal to the

understanding is dominant, music occupies a low rank "because it merely plays with sensation." Furthermore, music has the disadvantage of obtruding itself upon us whether we like it or not. We can turn our eyes away from a picture we do not like, but we cannot stop our ears against noise.

Among the formative arts, Kant gives the palm to painting, partly because "as the art of delineation it lies at the root of all the other formative arts," and partly because of the wider extent of its power of representation.

XXIV. THE ESTHETIC ANTINOMY

At this point, the Kantian machine begins once more to whirl, and turns out an *Antinomy*. We do, and yet we cannot, dispute about taste. We do, and yet we cannot, claim for our esthetic judgment the necessary assent of others. On the one hand, esthetic judgments *do not* imply objective standards, since, if they did, any dispute about them could be settled by argument and proof. On the other hand, they *do* imply objective standards, since, if they did not, we should never even think of disputing about them or of expecting others to share our views.

This Antinomy, however, like the Antinomies of pure and practical reason, can be solved. Esthetic judgments do imply the existence of a standard, and do involve a general *concept*—the concept of a subjective feeling of purposiveness experienced in the presence of a beautiful object. At the same time, this concept or standard does not acquaint us with any quality in things that can be known or proved. *My feeling* that a thing is beautiful does not demonstrate that the thing *is* beautiful in itself.

In short, the general concept of the feeling of purposiveness affords sufficient ground for *asserting* the validity of esthetic judgments, but insufficient ground for *proving*, though not for *feeling*, that some display better taste than others. We may then quarrel over taste, although we cannot effectively dispute about particular tastes. The only way I can bring you to share my point of view is not by argument, but by educating your taste till it agrees with mine.

XXV. TELEOLOGY, PURPOSE AS A CAUSE

Beauty as Pleasure. Purposiveness plays so central a part in Kant's esthetics that it is not surprising that he should devote the latter half

of the *Critique of Judgment* to a discussion of teleology and purpose in general. He begins to veer in that direction towards the end of the first division of the work. The beauties of nature, he tells us, suggest that "behind the production of the beautiful there is an Idea of the beautiful in the producing cause; *viz.*, a *purpose* in respect to our Imagination," just as the existence and order of nature suggest the Idea of a God as a reason for the presence of the universe. Still, there is much in nature that suggests, not a teleological, but a mechanical explanation of the occurrence of beautiful forms. This, taken in connection with the principle of not multiplying principles beyond necessity and with the purely subjective character of esthetic judgments, precludes us from using esthetic experience as an argument for the teleological constitution of the universe.

There is, however, reason for believing that in the supersensible world, esthetic, logical, and moral judgments have a common, though unknown, ground. The beautiful is closely allied to the good and the true. Beauty ennobles and elevates the mind above the pleasures of the senses. It is intelligible. It brings an immediate satisfaction which is an end in itself. The satisfaction it bestows is, like moral satisfaction, disinterested. It betokens freedom of the imagination. It is universal. All these characteristics point, like the moral law and the activities of pure reason, to a transcendent source numbered among the things-in-themselves.

Teleology Inadmissible as a "General" Explanation. We pass now to Kant's critique of teleological judgment, which deals with the scope and validity of *purpose* as a principle of explanation. Kant warns us at once against an undue extension of such explanation to everything and anything. There is nothing, he tells us, in "the universal Idea of nature, as the complex of objects of sense" to warrant our jumping to an all-embracing teleological conclusion. And, of course, it is quite out of the question to introduce purposes into the world of things-in-themselves, about which we know nothing.

Furthermore, *external purpose*, or accounting for things on the ground that they exist *in order to* promote one another's existence or well-being, may be ruled out at once as a principle of explanation. For example, neither experience nor any *a priori* necessity warrants human beings in thinking that what in nature they find beautiful or useful has been produced by nature in order to please or benefit them. Beauty and utility are wholly subjective and relative. "*It is I that introduce the purposiveness.*" All inanimate objects and events are quite ex-

plicable on mechanical principles by efficient causation, and in their case at least, teleological explanations are out of place and inadmissible.

Teleology Necessary to the Explanation of "Organic" Phenomena.

In the realm of biological phenomena, however, the situation is different. It looks very much as if in organic being "*every part*" were "*reciprocally purpose [end] and means*"; and as if all the parts were "*only possible through their reference to the whole*," and existed for the sake of the whole. This interdependence of the natures and functions of the parts of an organism on each other, and their dependence on the character of the whole of which they are the parts, cannot be satisfactorily explained by our minds on mechanical grounds, try as we may so to explain them. For our minds are so constituted that in explaining things they must *begin* with the constituent elements and, by means of synthetic judgments, combine them into wholes. They cannot *begin* with the synthesis and causally derive its elements from it. To them the whole is, as Kant puts it, "*the effect of the concurrent, motive power of the parts.*"²⁰ Our minds cannot reverse the process of explanation and understand how a body can be the *efficient cause* and motive power of the concurrence of the factors that enter into its constitution. The completed product comes *after* the process that builds it up, and the whole appears *after* its parts have been combined. And our Category of causation demands that causes should *precede* their effects. It is beyond the power of *human* minds, then, to apply the Category of causation to a process in which the completed product, *before* it is completed, influences and directs the process of its own completion, or in which a whole, *resulting* from a combination of parts, nevertheless *causes* the parts to combine as they do.

Still, a mind differently constituted from ours might conceivably be able to understand, in terms of efficient causation alone, how an organic body determines the nature and directs the activities of its various organs, and how these organs reciprocally support and determine one another's functions. It is because a mechanical explanation of organic phenomena is not *a priori* impossible that our minds go on trying to understand them in terms of efficient causation, in spite of the fact that for minds like ours efficient causation will not work as an explanation.

The Basis in Experience of Teleological Explanation. However, our minds demand an explanation of biological phenomena, and since mechanical, efficient causation will not work, they look elsewhere. Now, it is a matter of experience that the *representation* of a com-

²⁰ *Op. cit.*, II, 77, p. 323. The italics are mine.

pleted product does, as a matter of fact, cause and determine the process of completion, and that the *representation* of a whole may influence the nature and arrangement of its constituent parts. This we see in every department of daily life, in the fulfillment of every intention, in art, in manufacture, in the planning and realization of a human career.

Furthermore, we find that when we do represent a product as the cause of its own production, we are talking in terms of what we call *purpose*, and asserting the efficacy of purposes. Since this efficacy, which is undoubted, cannot be reduced by our minds to terms of mechanical causation, we have simply to call it *final causation*, or causation exerted from the end rather than the beginning—by the pull of the future rather than by the push of the past. This sort of causation, which, since it is not comprised within the causal category we cannot *understand*, we apply to biological phenomena. But, Kant warns us again, simply because teleology is the only explanation of such phenomena that will work for our type of mind we are not therefore entitled to attribute the behavior of nature as a whole to a purpose.

XXVI. THE TELEOLOGICAL ANTINOMY

Efficient vs. Final Causation. We are now confronted once more with an *Antinomy*. On the one hand, the human mind is obliged to judge that "*all* production of material things is possible according to merely mechanical laws." On the other, it is equally obliged to judge that "*some* production of material things is not possible according to merely mechanical laws."²¹

This Antinomy, Kant feels, is rooted in a confusion of the operations of the mind expressed in the guiding and regulative Ideas of Pure Reason, such as God, the universe, etc., with those expressed in the application of the Categories of the Understanding to the sensible world. Judgments of the understanding that phenomena are causally connected demand that *all* objects and events be regarded as the necessary products of antecedent causes, and therefore as *all* mechanically produced. But judgments guided by the Ideas of Pure Reason no less imperatively demand that we seek a transcendent cause for the existence of the universe, whose relation to the world cannot be regarded as mechanical, since mechanical causation holds only of the relation of events occurring *within* the universe and capable of being *understood*. Final causation, however, which involves a determination of the parts by the whole, comes nearer to expressing the possible nature of the

²¹ *Op. cit.*, II, 69, pp. 294-295. The italics are mine.

relation of the universe to its ground. Hence the reason for the existence of the world may more properly be described as a *purpose* or final cause than as a mechanical or efficient cause.

Solution of the Antinomy. The Antinomy is easily disposed of in Kant's opinion. For, supposing that things-in-themselves really were purposively connected, there would be no contradiction in their appearing, under spatial, temporal, and sensible conditions, as also mechanically connected by the Category of efficient causation. After all, it is merely a consequence of the particular constitution of our understanding "that we have to represent some products of nature as possible according to a different kind of causality from that of the natural laws of matter, namely, that of purposes and final causes." If, then, the really mechanical might underlie the apparently teleological, the really teleological might underlie the apparently mechanical.

Again, there is no contradiction in an object's being both mechanically and teleologically produced, if we say that its mechanical structure and behavior have the same relation to its purpose as the mechanical constitution of the universe has to the reason why there is a universe and why the universe is what it is. Furthermore, we are not forced to content ourselves with showing that mechanism and purpose do not contradict and exclude each other as principles of explanation. We are entitled to regard them as twin expressions of one and the same *supersensible* explanatory principle which transcends them both. Hence some production appears mechanical in character, some purposive, and we seemingly have two kinds of causation, final and efficient, on our hands. But in reality there may be only one principle and one kind of production, though what the nature of that principle is we cannot know, any more than we can know the nature of things-in-themselves.

XXVII. TELEOLOGY AND MAN

Warnings Against the Undue Use of Teleology. In an appendix to the above discussion, added in the second edition of the *Critique of Judgment*, Kant pursues further the question of teleology, particularly in its relation to theology. He reiterates that the scientist can gain nothing by employing the teleological method, and that it is his business "to pursue natural mechanism, in respect to the explanation of natural products, so far as it can be done with probability." Where mechanical explanations fail, the failure should be laid to our peculiar type of mind, and should not be supposed to indicate that "it is impos-

sible *in itself*" to express the efficacy of purpose in terms of efficient causation.

Since, however, minds like ours are obliged to use not only efficient but final causes in explaining the behavior of phenomena, we must introduce method into teleology, just as we do into mechanical science, and ask what a phenomenal world run on purposive lines would be like. In the first place, we see that in such an order the mechanical aspects will be regarded as means to the expression of purposes.

Again, since the principle of economy governs teleological as well as mechanical explanation, final like efficient causes are not to be multiplied beyond what is necessary, and supernatural explanations are to be reduced to a minimum.

Man, the Final Purpose of Nature. Passing now to *external purpose* Kant asks whether nature suggests the existence of any *final purpose*, at which she aims, and answers that she does not. We are accustomed to say that vegetables exist for the purpose of being eaten by animals, animals for the purpose of being eaten by man, and *ergo* man is the purpose to which everything is a means. But, Kant points out, we can argue with Linnaeus in just the opposite way. Grazing animals exist in order to keep vegetables from killing each other off, carnivorous animals to keep the herbivorous animals from killing off vegetables, and finally man, by killing off lions and tigers, helps keep them from eating up the cows and goats that by their browsing help keep the vegetables from crowding out each other. "And so man, although in a certain reference he might be esteemed a purpose, yet in another has only the rank of a means."

Still, in spite of Linnaeus, and in spite of the seeming indifference and even hostility of nature to man in many respects, Kant feels that man in one sense is "not merely, like all organized bodies, a *natural purpose*, but also the *ultimate purpose* of nature here on earth; in reference to whom all other natural things constitute a system of purposes." As an *animal*, however, man has no prior claim over the other animals to be nature's darling. It is only if we regard man's earthly vicissitudes as a discipline for cultivating his higher, rational nature, and if we can describe that nature as self-justifying and a means to nothing beyond itself, that he can be regarded as the final end of creation.

Now, man actually has such a nature. He alone, in his subservience to the moral law and in the expression of his freedom in accordance with it, proves to be a self-legislating, self-determining being whose purpose is wholly set by its own nature, and wholly realized by the free exercise of its own essential activity, altogether independent of

natural conditions. He, therefore, may be regarded as the "final purpose, to which the whole of nature is teleologically subordinated."

XXVIII. TELEOLOGY AND GOD, FREEDOM, AND IMMORTALITY

The Moral Argument for the Existence and Nature of God. We pass now to God and to such suggestions of his existence as a teleologically constituted universe may afford. On the whole, Kant agrees with Descartes that, though the order of nature justifies the concept of an intelligent cause of the world, it can in itself "disclose to us nothing of a *final purpose of creation*." Our data are merely empirical, and here, as everywhere, conclusions drawn from experience are not valid beyond experience. The natural order can only suggest the existence of a supreme being as the ground of the universe, but "with all our knowledge of nature it remains undecided whether that Supreme Cause is its original ground according to a final purpose," or produces events by a "mere necessity of its nature." *Natural theology* may, then, be dismissed from consideration.

The only workable theology, Kant concludes, must be founded on *moral* grounds. As we have just seen, we are entitled to regard man as the final purpose of a teleologically constituted universe, only because he has a moral nature. And the self-determining, self-legislating, and self-justifying character of a moral nature is applicable to a supreme being. Attached to it such a character becomes omnipotence, omniscience, and infinite goodness and justice.

Furthermore, since the supposition that the ground of all existence is moral is a necessary presupposition of the validity of our own moral activities, we are entitled to believe it to be such. However, it must be remembered that the necessity of admitting on moral grounds that there is a God, is not a *demonstration* of his existence. Nor does thinking about God in certain ways give us any *knowledge* of his nature. Moreover, we apply moral qualities to God from the analogy of our own finite experience. Finally the moral argument cannot flout rational self-contradictions and absurdities. It can never warrant us, for instance, in even *thinking* of God as a mystical being that confounds reason, or as a magnified human being, or as a being who can be experienced and influenced and who can influence us, or as a being who can be pleased and placated "by other means than by a moral sentiment."

The same restrictions are laid by pure reason upon practical reason's necessary assumption that we are immortal. Our liberty to go

beyond reason in our belief in a future life is not license to go contrary to reason and the law of self-contradiction in our thoughts of what such a life may be like.

Can, then, the implications of teleology *convince* us of the existence of God, freedom, and immortality? On theoretical grounds and by rational arguments, *no*. But although we cannot be convinced on theoretical grounds of their existence, we can in a sense be *convinced* on practical grounds, if by conviction we mean *acting as if* such objects existed. Our moral life is action of this sort, and it is a permanent principle of the mind to assume as true such objects as make *moral action* rational and obligatory, even though they do not make *knowledge* of themselves obligatory or even rationally possible.

Curiously enough, freedom, the other supersensible postulate of moral behavior, is an objective reality as well, whose activity is actually displayed under the Category of causation, and whose effects are empirical and observable. Although we cannot *demonstrate* the existence of freedom, we can *experience* it in ourselves.

The Necessity of a Theology. Whatever, then, we may think of the moral argument for God and immortality, it is the nearest thing to a proof we have. At least, it lays the foundations for a theology with its "determinate *concept* of the Supreme Cause" as moral, and for *religion*, with its "*recognition of our duties as divine commands*." For this reason alone the moral argument renders us a great service. Theology may not have any objective validity. It may not give us knowledge of any sort. Nevertheless it is useful in that it systematizes our thinking about God.

Finally, although we cannot compass God with the Categories of the Understanding, which apply only to objects of possible experience, we may yet regard the qualities we have to attribute to him, if our moral life is also to be a rational life, as a kind of "cognition of God and of His Being." An ethical theology is, therefore, possible, founded on "properties and determinations of His causality merely thought in Him according to analogy." Such a theology has all the reality requisite for giving a supersensible and rational foundation to ethics and to right behavior. Conversely, ethics needs a theology, for, though the moral law can be observed without the aid of theology, we cannot see any rhyme or reason in ethical rules without invoking the final design theology contributes. To renounce theology is to renounce reason in conduct.

XXIX. THE MINOR SUCCESSORS OF KANT

Reinhold. The influence of Kant was immediate, widespread, and powerful. Its most noteworthy fruits were the four great German idealists, Fichte, Schelling, Hegel and Schopenhauer. But before passing on to them we shall do well to glance at other, minor disturbances created by Kant's views.²² Naturally enough, they resolved themselves into a battle of the *pros* and *cons*, in which, however, the *pros* often modified considerably the standpoint they were defending, in a way, sometimes, that pointed towards absolute idealism. Thus Reinhold (1758-1823), for long professor at the University of Jena, was a moderate, and cautious, and somewhat critical Kantian. He felt that Kant had taken too much for granted the fact of consciousness, just as Kant felt that Locke and Hume accepted uncritically the presence and the activity of mind. Consciousness, Reinhold felt, immediately presented us with an internal form and matter of its own, and implied a perceiving and knowing subject and an external object by which the subject was affected. The subject contributed form to conscious presentations, the object, their content, though neither the one nor the other was to be confused with experience itself. In each act of presentation an object appears and a subject perceives in one and the same act.

Although the subject cannot know things-in-themselves, but only itself as affected by them, it cannot deny the fact that it is affected, and therefore cannot deny that things-in-themselves exist. Hence we do *know* that there *are* such things. Perception is itself a formalizing in terms of time and space of the matter provided by them. The resultant perceptual experience becomes matter for further formalizing by the understanding, and the categories and concepts which enable experience to assume an intelligible structure afford, in their turn, the stuff to which reason imparts the final form of an absolute unity and a single meaning.

Consciousness is, then, in a sense, a progressive actualization of certain possibilities of representation, sensible and intelligible, which it contains within itself. This actualization, however, implies that there is an *impulse* or *drive* in consciousness towards realizing them, which appears in consciousness as *desire*. Desire is twofold—on the one hand, to be affected by things-in-themselves and to receive the matter of experience and to feel pleasure; on the other, to express the mind's ca-

²² The ensuing discussion is largely drawn from Kuno Fischer's *Geschichte der neuern Philosophie*.

capacity for giving form to the matter thus provided. The sensible desire to receive the stuff of experience Reinhold associated with our selfish impulses and, when controlled by reason, with the search for happiness. The desire to organize experience he regarded as governed by the moral law, suffused with a sense of duty, and as a quest for the moral good.

We may remark that Reinhold makes two significant shifts in the emphasis of the Kantian system. He accents the active side of knowledge. Experience is *experiencing*, knowledge is *knowing*. And he asserts that the *existence* of things-in-themselves does not lie beyond the province of knowledge and the powers of demonstration, but is *knowable*. His views, however, put forth though they were as a constructive interpretation of Kant's philosophy, were too radical to be stomachied by those who swallowed Kant, hook, line and sinker. They were also seized on eagerly by the anti-Kantians as proof positive of the justice of their complaint that Kant was really a skeptic scarcely preferable to Hume.

Schulze. A noteworthy attack upon both Kant and Reinhold was made by Schulze, in a book entitled *Aenesidemus*, in which he accused Kant of not answering Hume and of becoming involved in fatal self-contradictions. Kant's treatment of causality, he says, is still open to Hume's objections. Willy-nilly, Kant ends by assuming in the *Critique of Pure Reason* that the necessary forms of our thinking are also the necessary conditions of the *existence* of objects; in which case things-in-themselves are *knowable*. For that matter, they must be. If things-in-themselves are really unknowable, then we have no business to assume that they exist, or to assert that they in any way *cause* or are the *ground* of experience, or, as knowing subjects, *cause* our judgments and categories to be what they are.

The same difficulties, in Schulze's opinion, beset Reinhold. He tells us that things-in-themselves *exist*, and are the *causes* of our experience. But in the same breath he tells us that they are unknowable, and, by so doing, implies that reality and causation, which are characteristics of *known* experience, have no application to them.

Obviously, *unknowable* things-in-themselves are a shaky foundation on which to build a philosophy. Reality must be *knowable* if it was to be *real*. It could be rendered knowable in two ways. Either philosophy could revert to *realism*, and maintain that our minds could know external and independent objects as they *are*, or it could branch out on a new line of thought, dispense with external objects altogether, and find in the nature and activities of consciousness the essence and

ground of all being. This had already been attempted by Berkeley, but in a way that shattered the unity of Reality, left its fragments without a common ground, and raised grave difficulties as to their interrelations. An *idealism* must be sought which tied together all consciousness and found for it a single underlying cause.

Maimon. In directing philosophy along this novel path, the skepticism of Salomon Maimon (1754-1800) was instrumental. According to Maimon, things-in-themselves are meaningless. They are invoked only to account for the world as it appears. They can, then, be dispensed with if we regard the *cause* of appearances as not outside but inside consciousness. Still, such a cause is not *known* by us. If it were, we should have perfect knowledge. Hence knowledge is always irrational to some extent, and can never attain complete certainty, save in the sphere of mathematics—where certainty is possible, only because we are there dealing, not with the content of consciousness, but with unavoidable conditions of experience, like space and time.

The Kantian categories, however, can claim no such certainty, since they cannot impose more unity and connection upon experience than experience actually exhibits, and experience is not given in a completely connected condition. What we shall perceive and how we shall perceive it cannot be determined beforehand. Therefore, *no* certain synthetic propositions *a priori* can be made regarding it. For all we can *know*, experiences might turn up which were not caused and not substances or qualities or definable in terms of any of the "categories."

Beck. Maimon's skeptical conclusions suggested that, if an idealistic way out of the Kantian difficulties was to be found, consciousness must be further studied with a view to discovering how it produces its content. This task was undertaken by Beck (1761-1842). Beck begins by a criticism of the theory that knowledge is a kind of registration of external objects, and that ideas agree with or represent their objects. On such a theory of knowledge Kantianism is impossible. The only possible way of straightening out Kant is to regard as *activities* of consciousness the so-called *objects* given in experience. The fundamental presentations of consciousness are not facts but acts. Perceptions are *perceivings*. The same is true of the so-called formal aspects of consciousness. Space and time are not forms, they are deeds, doings, consciousness caught in the *act* of synthesizing and organizing its acts of presentation. So, too, the categories are nothing but the *acts* of reason, not *a priori* rules by which mental activity is governed. Concepts are *conceivings*. Reality is *realizing*.

Jacobi. Another, but somewhat different, criticism of Kant was made by Jacobi (1743-1819). He could see little use in a philosophy that was self-confessedly unable to penetrate the true nature of the Real. Nor could he swallow an interpretation like Beck's that tended to transform our perceptions or perceivings of things into the objects that were perceived. He stuck, then, to a belief in things-in-themselves. But he could not accept the Kantian view that these things were unknowable and yet the causes and grounds of our perceptual experience and our knowledge. True, no amount of *reasoning* could assure us of their existence or their nature. But reason was not the only avenue of approach. The existence of things-in-themselves is a matter of instinctive belief, and this belief goes just as deeply into the nature of the Real and is just as trustworthy as any results of reasoning could be. Therefore, whereas for Kant there can be only *practical* certainty of their existence, as necessary postulates of moral action, for Jacobi there can be also an equal *theoretic* certainty. Quite apart from ethical considerations, and relying simply upon the testimony of perceptual experience, we can be certain that things-in-themselves exist.

To be sure, Jacobi feels, we can see what Kant was trying to do. His doctrine of things-in-themselves was an attempt to rescue philosophy from going over the precipice towards which it had been headed ever since the time of Descartes, and from annihilating itself, along with the existence of an external world, in a purely *subjective* idealism which reduced the Real to nothing but a dream of the perceiving and thinking subject. At the same time, Kant himself, having rescued philosophy by the device of the things-in-themselves, also came near to reducing our entire experience and knowledge of things-in-themselves to a mere figment of the mind, and thus rendering his device useless.

These philosophies, though not of the first rank, pointed the way by their criticisms of Kant to the great idealistic systems to which we now turn.

Chapter XV

FICHTE

I. LIFE

Early Life and Education. The first of the great German idealists, Johann Gottlieb Fichte, outlived Kant by only ten years. The period through which he lived was stirring, covering, as it did, the career of Frederick the Great, the American and French Revolutions, and the rise and fall of Napoleon. It saw also the rise of the democratic movement in Germany and the first steps towards her eventual unification.

Fichte was born in 1762 at Rammenau in Saxony of a middle class family in modest circumstances, which was descended from a Swedish soldier in the army of Gustavus Adolphus, wounded and left behind in the town during the Thirty Years' War. His father, a pious, upright ribbon-maker, had married above his station, and the Fichte family was not harmonious. With his mother, from whom Fichte inherited a quarrelsome disposition, his relations were always strained. He was a studious and independent child, endowed with an extraordinary memory, which attracted the attention of a nobleman living in the neighborhood, who undertook his education. He studied theology at Jena and Leipzig, with an interim of making his living as a tutor in a Swiss family in Zurich. Here he became engaged to be married, but his difficulties in making a living and financial reverses in his fiancée's family postponed his marriage for nearly nine years.

Rise to Fame. Meantime, Fichte had fallen much under Kantian influence, and particularly under the spell of *Critique of Practical Reason* and *Critique of Judgment*, which especially appealed to the moral earnestness and enthusiasms dominant in his character. He wrote an explanation of the latter volume—his first philosophical work—which was never published. Furthermore, he went to Königsberg and had an audience with Kant, by whom he was coldly received. Not to be rebuffed, he wrote in four weeks his first published work, an *Essay Towards a Critique of all Revelations*, and submitted it to the old philosopher. Kant was delighted with it, and with Fichte, and

got it published. By mistake Fichte's name and the preface he had written were omitted, and the work was ascribed to Kant himself and highly praised by the critics. Kant corrected the error, revealed the true authorship, and Fichte became famous overnight.

In this essay, Fichte attempted to fit belief in a revealed religion into the Kantian scheme, using all the Kantian methods. Such belief, he says, bound up, as it is, with a supernatural interference with the natural order, cannot be based upon either pure or practical reason, both of which present to us universal laws, physical and moral, allowing of no exceptions. However, certain occurrences associated with profound changes in our moral nature, as, for example, the phenomenon of religious conversion, may *appear* to be of supernatural origin and to be direct and exceptional revelations from God. The supernatural halo does not emanate from the event itself, which is just a sensible event like any other. Neither is it bestowed by reason, which cannot prove or disprove that the event is of supernatural origin. It is rather a matter of the imagination. A revelation, then, is an event that dispels moral confusion and brings moral peace, imagined as directly and especially produced by God to that end. No necessity of our nature impels us to regard such occurrences as divine interventions. But it is natural and highly beneficial for us in certain circumstances to do so. In time we may outgrow the need for such beliefs along with the moral conditions they accompany. For the present they have their use in promoting obedience to the moral law.

University Career at Jena. Things now began to come Fichte's way. He got married, and published, anonymously, two interesting political essays inspired by the French Revolution, defending the view that the individual has certain inalienable rights, like freedom of thought and speech and the right to change or overthrow any form of government, which are part of the essence of our moral nature. Also, he was offered and he accepted in 1794 a chair of philosophy at the University of Jena, which at that time was the most famous university in Germany and a leader in the new philosophic and literary movements. Furthermore, it received additional light from the nearby court of Weimar, whose ruler vied with the princes of the Italian Renaissance in gathering about himself a galaxy of genius, in which Goethe stood pre-eminent.

Philosophically, the university was steeped in Kant, of which hitherto it had enjoyed the somewhat weak and tepid infusion supplied by Reinhold, Fichte's predecessor. The new and more fiery, more morally tintured, and more emotional interpretation provided by

Fichte won immediate approval and enthusiastic support. His lectures on Kant, however, became more and more an exposition of his own maturing views, of which his various publications with regard to his *Wissenschaftslehre*, or *Theory of Science*, are a summary.

The system he set forth made many converts. Reinhold adopted it wholeheartedly. Jacobi, one of Fichte's most eminent contemporaries, was readily attracted by it, in spite of his skepticism regarding the power of reason to lead us to any but atheistic and fatalistic conclusions about the nature of Reality, and his consequent insistence upon the validity of intuition and immediate perception of truth. At the same time, Fichte made many enemies. The more conservative Kantians were aghast at the liberties he was taking with their master, and Kant himself was so annoyed by the Fichtean interpretation of his philosophy and so alarmed by the charges of atheism it provoked, that he publicly repudiated it.

In other respects, too, Fichte soon found his position at Jena becoming more and more difficult. His temper and his discretion were not of the best. His political views were suspect. His proposal to lecture on Sunday mornings, though at an hour that would not conflict with divine service, was hailed as an attempt to introduce the cult of the Goddess of Reason at the moment worshiped in France, and raised such a rumpus that, at the instance of the Weimar Government, the hour was shifted to the afternoon. Then, too, private efforts that he made to abolish student societies, or rather his public submission of the question to the university authorities, led to riotous manifestations against him which necessitated his withdrawal for a time to the country. Last but not least, he was accused of atheism, and, though he vigorously defended himself against the charge, he refused to be guided in any way by the university authorities, and thumbed his nose at the Saxe-Weimar Government. His threat of resignation was taken at its face-value by the Weimar Council, whose decision was concurred in by the Grand Duke, and in 1799 he was to all intents and purposes dismissed from Jena.

Move to Berlin. He had, however, powerful friends in Berlin, like Schlegel, the leader of the German Romantic school, and the theologian and moralist Schleiermacher, who arranged for him to come to the Prussian capital. This was done without difficulty. Kant's persecutor, Frederick William II, was dead, and his easy-going son, reassured as to Fichte's political innocuousness, dismissed the philosopher's asserted irreligion with the intimation that atheists were God's concern, not his.

At first, things went smoothly. He was on intimate terms with

Schlegel and Schleiermacher, and with the philosopher Schelling, whose views we shall presently describe. But in Berlin, as in Jena, peace was shortlived. In 1800 Fichte published his *Vocation of Man*. Its highly moral tone offended both the sentimental romanticism of Schlegel and the rationalism of the old guard, including Schleiermacher, who wrote bitter criticisms of it. Schelling, too, was drifting away from the Fichtean philosophy and setting up a philosophy of his own, and he and Fichte disputed with each other in increasingly acrimonious terms.

However, so far as the general public was concerned, Fichte had a huge success in Berlin. He had, to be sure, no university position, but the public lectures he gave were crammed with the best people. Nor were academic offers tardy in presenting themselves. The Russians called him to Kharkov, the Bavarians to Landshut, but he declined the proffered positions. Finally, it was arranged that he should teach summers at the University of Erlangen. He was also writing continuously. His Erlangen lectures were published under the title of the *Nature of the Scholar*, and were quickly supplemented by a series given in Berlin *On the Characteristics of the Present Age*, and *The Way Towards the Blessed Life, or Doctrine of Religion*, in which he vehemently denounced the corruption, as he saw it, of the times, and recalled humanity to what he considered its true destiny.

The "Addresses to the German Nation." The Napoleonic Wars had now burst upon Europe, and Prussia, deserted by the other German States, and facing Napoleon alone, was defeated at Jena. Fichte had volunteered as a lay chaplain, but had been refused. Now, with the government deserting Berlin, he went first to Königsberg, where he taught at the university, and then to Copenhagen, as the French invaded East Prussia. But within a year he was back in Berlin again, delivering his famous *Addresses to the German Nation* under the upturned noses and the somewhat contemptuous gaze of the French, who still occupied Berlin, and who felt, apparently, too secure to be bothered with suppressing such idealistic rantings.

The theme of the *Addresses* is the superiority of the German nation to all others. The Germans are the purest, the most homogeneous and the most vital of all races. The German language is the best of all languages. In the German Reformation the Christian religion attains its greatest height. In German philosophy the human mind reaches its greatest profundity. It is the mission of Germany to realize her cultural possibilities and to Teutonize the world.

To fulfill her glorious destiny Germany must unite. To unite she

must rally round Prussia, her natural center of gravity. To maintain her unity, she must develop and impose a system of education which will bring her genius to fruition, inspire her people with a sense of their racial, historical, and cultural oneness, and arouse in them a burning love of the Fatherland.

Fichte's ideas on education received a new stimulation from the proposal to establish a university at Berlin. He was asked to submit proposals for a scheme of organization—which he did at length. But his ideas were too radical to be accepted. However, he was given a post at the new university, which was opened in 1810. He now attempted a new exposition of his system in lectures on the *Facts of Consciousness*, *Transcendental Logic*, and *Theory of Law*, which, however, were inferior to his earlier works and added little to them. His temper, too, was deteriorating, and he was again involved in academic disputes. Indeed, after a few months he resigned the rectorship of the University, to which he had been appointed, simply because he could not have his own way in everything.

Death. It was well perhaps that Fichte's life should be near its end. He was permitted to die, as he had lived, with his boots on, and to escape what might well have been years of decreasing power and increasing petulance.

The beginning of Napoleon's end was at hand, and his armies in retreat from Moscow were straggling in confusion through Germany. The moment for liberation had struck. In March, 1813, Prussia allied herself with Russia and declared war upon France. Fichte volunteered again, but was once more refused. His voice, however, was heard, extolling the justice of the Prussian cause and prophesying in the war a new means for hastening the unification of Germany under Prussian leadership.

Meantime, the wounded were pouring into Berlin in such numbers that an appeal was made for volunteer nurses. Fichte's wife responded at once and worked in the hospitals during the winter of 1813. Early in 1814 she was taken with a fever. Fichte, whose health had been failing for some time, tended her devotedly, passing the day at her bedside and postponing his lectures till evening. Just as she was recovering Fichte was stricken with the same disease. He lay in a coma for eleven days, and died on January 27th.

II. INFLUENCE OF KANT AND THE MINOR KANTIANS

It is fair, I think, to say that the theme of Fichte's philosophy is in the main a dramatization of *Critique of Practical Reason* and *Critique of Judgment*, in which some of the suggestions dropped by the lesser Kantians we have just been discussing were also adopted and organized. He agrees with Reinhold in regarding consciousness as essentially an activity busied with realizing its own potentialities. With Maimon he holds that things-in-themselves are not necessary to explain the content of consciousness, which can be derived from the thinking subject. Furthermore, he takes the hint dropped by the Jewish philosopher that consciousness is at heart a search for an ideal that is never attained. Again, he is sympathetic with Beck's contention that the objects and presentations of consciousness are really *acts* of the mind, in which it represents to itself its own nature, and that Reality is essentially a dynamic, not a static, affair, a process of *realizing* rather than a condition of realization. With Jacobi, too, he is ready to admit that *feeling* brings us closer than *reasoning* to the nature of the Real. The upshot of it all is that Fichte throws the unknowable *objective* things-in-themselves into the discard, and regards Reality as an absolute thinker or "ego" producing its own experience out of itself, and progressively organizing its experience in accordance with necessities imposed by its essentially moral and purposive nature.

In the *Wissenschaftslehre*, or *System of Science*,¹ Fichte works out this conclusion in a systematic and detailed manner. The goal of philosophy, he tells us, is to reduce all human experience and activity, all science and all knowledge, to a fundamental principle which shall be one, self-evident, absolute, exhaustive, all-comprehending, and all-explaining. By the degree of its approximation to this goal the value and truth of any particular philosophy must be judged. So tried, all *realistic* systems are found wanting. They lead to materialism and fatalism. They satisfy only lower types of intellect. They cannot explain the existence and nature of consciousness, and hence they leave the problem of knowledge without solution. Consciousness can be accounted for, and knowledge can be made intelligible, only on the hypothesis that consciousness itself is the active principle from which the whole universe is derived.

¹ The discussion of the *Wissenschaftslehre* is founded on Kuno Fischer's *Geschichte der neuern Philosophie*.

III. THE NATURE AND IMPLICATIONS OF SELF-CONSCIOUSNESS

The Ego and the Non-Ego. Let us now examine consciousness. We are struck at once, with the fact that every act of experience and thought involves the assertion of the existence of a thinker, or ego. Every "think" is an "I think." It is wrong, then, Fichte feels, to interpret Kant *realistically* and to look upon the things-in-themselves as entities existing independently of thought unknowable in themselves. They rather represent ideal limits or goals of our thinking set by the activity of thought itself. To endow them with an existence over and above what they mean to consciousness is a faulty interpretation of their nature.

The existence, however, of the subjective thing-in-itself, the thinking subject or "ego," is a necessary postulate, or assumption, of all thinking, and therefore of all existing. But this assumption of the existence of a thinking subject is obviously an act of that same subject. When I say "I am," it is *I* who say it. It is *I* who assume my existence.

This postulation of its own existence by the ego is the first and fundamental principle of the Fichtean philosophy. Since it is a first principle, it cannot be proved. It can only be felt and lived. It can only be *acted upon* as if it were true. I cannot force a man to assume his own existence. I can only ask him to.

Now it is necessary to my *self*-consciousness that I should project a part of my experience outside my *self*, make of it an external object, and assume that it is not myself. Otherwise, I should have nothing to distinguish myself from and to contrast myself with. Since, then, the existence of self-consciousness depends upon a consciousness, also, of something not myself, *the ego*, says Fichte, *in postulating its own existence, necessarily assumes the existence of a non-ego*. This is the second principle of his philosophy.

However, the distinction between subject and object is still a distinction *within* experience. If, then, there were no ego to do the experiencing, there would be no non-ego to be experienced. On the other hand, if there were no non-ego for the ego to experience as something different from itself, there would be no object distinct from the thinking subject, and hence no thinking subject distinct from the object. Either aspect, therefore, is necessary to the existence of the other, and both are equally necessary to the existence of a self-conscious experience.

IV. THE ABSOLUTE EGO

Expressions of an Absolute Ego. But, in that case, both the empirical ego and the empirical non-ego—that is, both what I recognize in my experience to be myself, and what I recognize as not myself—must be two aspects of a transcendental “I,” or ego, that thinks itself in these two ways in order to become self-conscious. This transcendental thinker, which creates an experience in which *selves* are distinguished from one another and from objects they assume to be external to them, is called by Fichte the Absolute Ego.

The division of the Absolute Ego into subject and object gives rise to another fundamental distinction, this time within the “me” part of my experience. In so far as I am acted upon and determined by the external world, I am a receptive and *passive* being, a mere *spectator* of existence. As such I am, in Fichte’s words, *theoretic*. On the other hand, in so far as my experience and behavior are not simply *reactions* to external circumstances determined by the nature of those circumstances, but are my own *actions* determined only by myself, I am an *active* and *practical* being.

Behind this opposition of empirical activity and passivity there must be an absolute activity, which is not conditioned by a corresponding receptivity or passivity external to itself. On the contrary, it must be conceived as self-conditioning and self-supporting, and therefore as freely determining the opposition of activity and passivity within itself, just as it divides itself on its own initiative into the ego and the non-ego. In short, the Absolute Ego freely *wills* to be what it is.

We are now ready to “deduce” five fundamental forms of thinking and existing, *reality*, *negation*, *relation*, *causality*, and *substance*. When I say “I am” and thereby assert my own existence, I postulate myself as *real*. When I distinguish what is not myself from myself, I use for the first time the word “*not*.” When I postulate both myself and what is not myself as interacting and interconnected in my experience, I *relate* the ego and the non-ego to each other. In regarding, as I must, the experience of which I am the passive and recipient spectator as also an experience originating in the creative activity of my own thinking, I am asserting that the passive and theoretic part of my nature is a *result* of which the practical part of my nature is the *cause*. Finally, in regarding both myself and what is not myself as two co-ordinate parts or factors of *my* experience, I am asserting both myself and the external world to be *modifications* of an absolute self or *substance*

underlying both the experience I call *myself* and the experience I call outer and objective.

V. THE ANSTÖSSE OF THE ABSOLUTE EGO

The Development of the Absolute Ego. We see now *why* the Absolute Ego divides its experience into an ego and a non-ego reciprocally conditioning each other's existence. It does so *in order to become self-conscious*. But to become *self-conscious*, we must *reflect* upon our experience. Complete self-consciousness can only be attained on the level of reflective knowledge, which acquaints us with the truth about ourselves. It is the complete self-consciousness given in *self-knowledge* that the Absolute Ego is seeking to attain. And, since the postulation of the non-ego is the first condition of self-consciousness, such postulation, with the resultant universe composed of "me" and "not-me" in infinite profusion and variety, is a necessary means to the Absolute's knowledge of itself.

The development of absolute self-knowledge proceeds by a succession of definite acts, called by Fichte *Anstösse*, or thrusts. The first of these *Anstösse* creates mere unreflective sensation, which is a step above unconsciousness. The moment, however, that sensation appears, the Ego has limited itself by creating a definite and restricted content of consciousness.

The second *Anstoss* takes place when the Ego, in becoming *aware* of the fact that it is perceiving, differentiates itself from its perceptions and thus turns them into a non-ego *other than* itself.

The third *Anstoss* is accomplished when the Ego, by means of memory and imagination, turns its perceptions into a world of *objects* and its awareness of them into a consciousness of *things*.

At this point the categories come into play. The non-ego seems to be the *substance* of which different "things" are the *modifications*, and also seems to *cause* the subjective images which picture and duplicate within the ego the experiences we call the external world. At this point, also, we get space and time. Space is the principle that differentiates individual objects from one another, however alike they may be in all other respects, and that breaks the non-ego into a multitude of external objects reciprocally excluding and limiting one another. Time is the expression of the fact that these objects alter their spatial relations to one another in a certain irreversible order, which cannot be run backward.

The fourth *Anstoss* occurs when the Ego reflects upon the subjec-

tive images in consciousness, classifies them, abstracts general ideas from them, and thinks about them in general terms. The fifth comes to pass when the Ego again reflects upon these concepts, and by exercise of the faculty of judgment arranges them in logical relations to one another. Finally, in the sixth *Anstoss*, the Ego reflects upon its powers of judgment, recognizes itself as the originator of the laws that govern its thinking, and knows itself to be the basis of its own knowledge. Could I myself fully accomplish this step, I should know the whole truth about the universe, the whole universe would be wholly *within* my experience, the distinction between the ego and the non-ego would disappear, and I, the finite ego, should have become identical with and indistinguishable from the Absolute Ego. But in that case, I and the universe, and consciousness itself, would have disappeared, since all are dependent for their existence on an opposition between an ego and a non-ego.

VI. THE NATURE OF THE ABSOLUTE EGO

The Absolute Ego an Eternally Uncompleted Process, with God as a Goal. We have now further light upon the nature of the Absolute Ego. The Absolute Ego is not a substance. It is a *process*. It is a *striving* towards a goal. But *striving* implies a struggle against resistance. To be *striving*, then, is to find obstacles and limitations to overcome. Without these obstacles there could be no overcoming, no winning. Hence if the Ego is to *win* and to *attain*, it must impose limitations upon itself for the purpose of conquering and doing away with them. The world-process is like a game which can be played and won only by the aid of an opponent and of set rules regulating the moves.

Striving, moreover, implies *will*. So we are led back once more to the fact that the Absolute Ego is an Absolute Will. And we can now understand the distinction between the practical and the theoretic ego as a twofold *purpose* of this will. The will's purpose to be conscious of itself is the basis of the theoretic ego and the foundation of *knowledge*. Its *purpose* to translate this knowledge into action and to *enact* its ideal is the basis of the practical ego and the foundation of *morals*.

We have talked of the Ego as purposing and willing to know its own nature and to express that nature in action. But what is its nature? What is the ideal it is seeking to enact? Fichte's answer is that the goal the Ego sets before itself is activity for activity's sake; activity, free and spontaneous, such as we find in playing a game. For in a

game our opponents and obstacles are not forced upon us against our will, but are freely chosen and welcomed, and we strive to win, not for the sake of winning, but because the striving to win is part of the game itself. This ideal of a completely free and spontaneous activity, indulged in and carried on for its own sake, is God.

God, however, must forever remain an unrealized ideal. For the Ego cannot attain to absolutely *free* activity without putting an end to that struggle *towards* freedom which is its essence. In the act of *winning* it would do away with itself, since its very self is a *process* and a *striving*—an attempt to win. We have already seen how the attainment of the ideal of absolute *knowledge* would abolish the distinction between ego and non-ego, and thus destroy consciousness. We have now to see that the attainment of the absolute moral *good* is for a like reason impossible.

VII. THE BASIS OF MORALITY

Morality a Struggle for Freedom. The eternal *struggle* to realize the ideal of absolute freedom and the equally eternal *failure* to do so, in which the life of the Ego consists, are seen in the situation of the finite egos, that is, of ourselves. To the finite egos, life seems cruel and harsh. The obstacles and the antagonists it opposes to our self-fulfillment appear as part of the non-ego and as an interference with our liberty, and our struggle with our environment and our fellow-men feels not like an exercise of freedom, but like a struggle against necessity. These limitations we cannot remove, neither can we *will* that they should cease to exist, for in so doing we should will our own destruction. We can, however, will to open our minds to the ideal at which the Absolute Ego is aiming. We can discipline ourselves to regard suffering and failure and misfortune and defeat, not as a thwarting of liberty by necessity, but as incidents in a *struggle* that we *welcome* and *freely* accept.

This self-discipline is a *moral* process. Its *purpose* is to enact the ideal of freedom in the life of the finite ego, so far as such enactment is possible. It is, then, an affair of the *practical* activities of the ego. It is, moreover, a discipline *freely* undertaken. It has to be if it is to be a *moral* process, for only that which we freely chose has ethical significance.

The Essentially Social Character of Free and Moral Action. But how can the finite egos possibly possess and exercise freedom of any sort, not to speak of choice? In so far as they are physical events—

different bodies as well as different selves—they are subject to the same determinism as governs the activities of all other physical bodies. And their wills seem to be constrained by drives, desires, and motives connected with their physical constitutions. In short, we appear as parts of a mechanically run universe subject to the causal law of necessary connection between events. The physical universe, then, seemingly affords no theater for moral conduct.

However, certain of the physical bodies by which I am surrounded and influenced do not *force* me to act. They rather invite and persuade me. These bodies behave towards me as if I were a free and autonomous being. But, if I feel that they are dealing with me as if I were free, I cannot but feel that *their* action, also, is freely, not mechanically, motivated. In other words, I feel that they are *fellow-men*, with egos inside them like my own ego. With such physical events my relations are not deterministic. My response to their influence is a *free* response. My interconnection with them is a *moral* relation. Moreover, only towards bodies of this sort can my behavior have any *moral* significance for me. In short, ethical conduct is essentially *social* in its origin and public in character.

VIII. SOCIETY AND THE STATE

The Function of the State to Guarantee Freedom. Since *moral* freedom is *social* in character, right, justice, and the like are dependent upon a *society* of egos. In the presence of other selves, each individual self has the *right* to be treated as a free, self-determining ego by its fellow-egos, and is under the *duty* of treating them as free, as long as they respect its rights. This right to be treated as a free being may be defended by force if necessary. But before using force, we must be certain that our rights have really been infringed upon by others. To decide this, appeal must be made to a neutral judge capable of giving a disinterested decision. In accepting his decision, I do not lose my freedom, since, if the decision is just and impartial, it expresses the will of all moral beings, including myself, and therefore fulfills my own will in so far as my will is moral and self-determined. Still, I cannot be expected to accept his decision unless I know the judge has the power to enforce it and to make others respect my rights. In short, there must be a state empowered to put the decree into effect.

The state is essentially a contract between individuals to respect one another's inalienable *rights* to self-preservation, property, and freedom from bodily violence, all of which are necessary conditions of the free

development of the personality of the Ego. The enforcement of this contract must be delegated to a *government*, itself governed by law, and answerable to the people for the execution of laws made by the people. To preserve law and order the state must have force at its command to prevent and punish crime. It must also possess the means, military and economic, of protecting its citizens against the competition or aggression of other states. It is also the duty of the state to provide its citizens with a livelihood, not through charity, but by providing them with an opportunity to work.

The Private Freedom and Duty of the Individual. The life of the individual, however, is by no means exhausted by his membership in the state or his duties as a citizen. He has also a sphere of private life and private action in which he is free to express his individuality as he pleases. It is the duty of the state not to interfere, itself, with the individual's freedom of private life, judgment, and behavior, and to protect that freedom against infringement by other people.

At the same time, the sphere of private life is a sphere of private *duties* of the utmost importance. For example, the relations between the sexes and between parent and child are the most intimate means of developing the self-consciousness and freedom at which the Absolute Ego aims. Moreover, the family is the fundamental unit of society. Hence the state is justified in regulating these relations and in requiring the fulfillment of the obligations involved in marriage, the proper care and education of children, and the like.

Again, private morality enjoins conduct towards both one's fellow citizens and the citizens of other states that the state itself does not require of, and impose upon, the individual.

IX. THE RECONCILIATION OF MAN WITH NATURE

The Necessity of Freely Willing and Accepting the Natural Order. In the state, however, the attainment of freedom has not reached its last possible stage, and therefore the potentialities of the moral life have not been exhausted. The state, to be sure, introduces the maximum of possible freedom into the relations of the finite egos to one another, but there remains to be solved the problem of the relation of man as a whole to the universe—the non-ego—with which he is confronted and by which he is limited. How is the maximum of freedom to be attained in his dealings with it?

The formal conditions of the reconciliation of man with nature are easily enough described. The Ego must will *freely* the mechanical

and deterministic order that limits it. The moment it does that it will become wholly aware of its own origination of its activities, and will overcome the conflict between freedom and necessity in a completely attained consciousness of its self-determination. In that event it would feel thoroughly at home in the world, and would see itself, its ideal, and all the rules and the moves of the game, enacted in its life.

Here, then, is the final problem of morality—to remake our actual world into a world of that sort, to conform the real to the ideal, and to reconcile the rules of the game with our desires, and our natural impulses with our spiritual cravings. With the solution of this problem, the real and the ideal, the mechanical and the teleological, would be amalgamated, and perfect freedom would be attained in perfect self-service. Conscience is the call of the ideal of freedom and completeness rebuking the incompleteness and partiality of our finite natures.

Attainment of the Moral Ideal Would Destroy Morality. *Complete* moral freedom, however, is as unattainable as complete *mental* freedom, and for the same reasons. To do away with the opposition between the ego and the non-ego in the moral world by realizing the ideal would be as fatal as overcoming it would be in the sphere of knowledge. Destroy the distinction in the one case, and consciousness itself would disappear; destroy it in the other, and morality would disappear. For moral activity, like consciousness, rests upon the Ego's contrasting itself with something not itself. Without the foil of vice and evil to contend with there could be no merit, no virtue, no moral worth. The annihilation of evil, then, which is the guiding ideal of moral action, would mean the annihilation of the moral good as well. Therefore *complete* moral freedom, like the complete mental freedom of absolute knowledge, must in the nature of things remain an ideal forever unattained, but nonetheless forever sought.

X. THE DUTIES OF MAN

Nevertheless, in spite of the fact that the moral law can never be completely enacted in our behavior towards either the limitations imposed upon us by our fellow-men, or those to which we are subjected by the non-ego, we must always conform our attitude and our conduct to its behests. We must always do right with no ulterior motive, simply because it is right to do so. We must do our duty, and do it solely for the sake of doing it. Being the sources of our deeds, we are responsible for them and for allowing ourselves to be motivated by other considerations than those of duty and right doing.

Behavior to be Moral Must be Rational. Moral action, however, is always *rational* action. It is rational, and hence moral, to subordinate the physical to the spiritual. But it is irrational and therefore immoral to *sacrifice* the physical to the spiritual, particularly if that sacrifice is motivated by love of power and fame rather than by pure love of doing what we think is right. We have certain *physical obligations* towards ourselves, and it is our *duty* to keep our bodies sufficiently strong and healthy to subserve their moral purposes.

So, too, our minds, which are the vehicles and the tools of the moral life, must be kept free and uncramped and unwarped, and their activities must be guided by the moral law and devoted to the attainment of the moral ideal of freedom. We are morally bound, also, to improve ourselves, to fulfill our duty as citizens, and to make the best of ourselves in our various walks of life and in our several professions.

XI. ART AND THE ARTIST

The Freedom of Beauty and Art. Beauty, like truth and goodness, is an expression of freedom. The artist in creating beauty feels free and undetermined by anything except his artistic genius, and the contemplation and enjoyment of the beautiful is shot through and through with a sense of liberation. Nay more, the free and spontaneous work of the artist is a direct revelation of the creative activity of the Absolute Ego fermenting within him. And the mind in its contemplation of the beautiful object not only receives a foretaste of absolute freedom, but is shown how a world that seems to exist independently of us may be in reality freely produced and fashioned by ourselves.

Beauty, then, is a *moral* value, and the activity of the artist is a *moral* activity. Still, the liberation effected by esthetic experience is not to be confused either with knowledge of the truth which makes us free, or yet with the practical moral activities by which freedom is won through struggle. The sense of beauty is a distinct avenue of approach to the ideal. For Fichte, as for Kant, the beautiful exhibits "purposiveness without purpose." Unsought for, it satisfies desire. Artistic creativity prescribes no ends to itself, but fulfills the supreme purpose of the will, which is to be free.

It follows that the artist is under a moral obligation to do the *best* that is within him and to exhibit the ideal. And a second-rate man, although it is not his fault that he is not a good artist, is under moral obligation not to produce for public consumption work that, because of his lack of genius, must in the nature of things be also second-rate.

Finally, the more free the whole man is, the greater the opportunity for the expression of the artistic genius in him. No one can be a good artist who is not also a good all-round human being. So, too, sound appreciation of art and judgments of taste cannot be had from men locked within the esthetic interest to the exclusion of all else.

Esthetic Experience Self-Justifying. Fichte notes the similarity between esthetic experience, which contemplates the beautiful object, and the contemplation of truth by the scientist and the philosopher. In both we have a contemplation of pure form which pays no attention to the other aspects and bearings of the object in which it appears.

Again, both sorts of contemplation are ends in themselves, and both confer freedom upon the spirit. The philosopher, in so far as he is a philosopher, cannot wish the truth to be other than it is. If he has got hold of what he thinks is the truth, his love of truth and his search for it are satisfied, whatever the truth may be. He cannot be committed beforehand to some particular point of view he would prefer to find true and would regret finding false. In the same way, a man in love with beauty cannot wish the beautiful object to be other than it is. He is content with the loveliness of what he is contemplating, whatever it may be. As a moralist or a scientist he might regret that so fair a thing should be frail or false but as a connoisseur of beauty he could not deplore that so frail or false a thing should be so fair. Beauty, like truth, whatever it pertains to, pacifies the will and enraptures the soul.

XII. THE REVISED SYSTEM

Solipsism Logically Necessary but Morally Impossible. The presentation of Fichte's system in the *Wissenschaftslehre* aroused a philosophic storm. Particularly, his doctrine that God is an unrealized and unrealizable ideal, and, at that, a state of being rather than a person, evoked the charge of atheism to which we have already referred. So it was that almost immediately he deemed it advisable to restate his views in a way that would make them clearer to the public as well as to his opponents. The most important work of this era of reconstruction was *The Vocation of Man*, published in 1800.

The earlier chapters of this work do little more than restate in a form more palatable to, and digestible by, the popular mind the main theses of the *Wissenschaftslehre*. We are *free*, Fichte reiterates, not only with a freedom of self-determination, *within* the causal linkage of events, but also because we freely *cause* the experienced world to which that linkage, along with space and time and the other categories, gives

formal structure. For the so-called *external* world is still *my* world, a part of *my* experience and therefore also *within* myself. My consciousness of the outer world is, then, really a representative of myself to myself.

The *logical* conclusions to be drawn from these considerations, Fichte continues, are that I myself alone exist, and that the whole universe, including other persons, is the creation of my own mind. However, as a moral, practical, active being, I have to act *as if* other persons besides myself existed, and *as if* I were surrounded and limited by an environment of which I am not the creator. I have, then, at least *to believe* that other selves and that external objects exist.

Nature of Moral Obligations. Now the moral and practical situation which involves this *belief*, and the conduct based upon it, imposes upon me obligations towards the experiences I call my fellow-men. But, Fichte goes on in the last chapter of the *Vocation*, if these experiences represent merely dream personages and not other real selves like my own, the sense of *duties* owed them is ridiculous, and my practical life is a kind of delirium. A duty towards a mere figment of my imagination would rest on insanity pure and simple. To act morally would be an exhibition of madness. On the other hand, if other selves *really* exist independently of me, and the experience to which I attribute objectivity is *really* objective, my moral activities have significance. Furthermore, if truth and the pursuit of it are nothing but a figment of my imagination and a dream image, then so-called knowledge is madness too. The *assumption* of the existence of an external world is therefore an assumption without which we cannot act, or think, or even live. Nor can we avoid making this assumption. It is not a consciously and deliberately formulated hypothesis. It is rather unconscious, instinctive, implicit, and prior to thinking and willing.

The Eternal and the Temporal Orders. What is, then, the ideal bound up with the *faith* in an objective reality larger than ourselves imposed upon us by our moral nature? It is the *improvement* of the world. It is possible, and it is our duty, to *better* the world in many ways. Evils of all sorts, physical, political, economic, and moral, confront us and impose upon us an obligation to remove them.

The ideal world, which would result if they were done away with, presents itself to us in two lights. On the one hand, it is something that can only be realized in the *future*. It is a divine, far-off event, towards which the whole creation moves, but towards which it can be conceived as moving by a purely mechanical and material process. The world-process may be a blind, non-purposive progress in the course

of which the things we find evil will be automatically eliminated. In that case, we are simply being swept helplessly along, willy-nilly, towards perfection. On the other hand, the ideal is something that can be realized in the *present*, by my own free will and act. I can cooperate with the natural process towards perfection, if such a process exists, and I can deliberately direct the course of nature towards the realization of human ends. I can here and now freely will the ideal to dwell in my own life, and can incarnate it in my own thought and action. In short, in the midst of imperfection I can live perfectly, and thus anticipate in my own self the goodness towards which the whole universe aspires.

But I can scarcely incarnate in my present life an ideal whose realization is only possible in the future. There must, therefore, already exist an ideal moral order of which at the present moment I am a member. This order which is equally attainable in the past, the present, and the future, is plainly something to which time and its divisions make no difference. It is lifted altogether clear of time. It is eternal.

Moral Action an Incarnation of the Eternal in Temporal Form. To live morally is to live irradiated by the vision of the eternal. Every good act is an incarnation of the eternal in temporal form. No good deed, however futile and fruitless it may seem to have been, is vain. Issuing from the eternal, it has made the eternal manifest in time, and has made the moment in which it was incarnate a portion of eternity. It may, indeed, seem ineffectual as a means towards bringing the ideal to pass in the future. It may be wrecked by the evil it is seeking to remove. But even so, it in itself, by the mere fact of its commission, realizes the ideal it seeks to serve.

This eternal order which justifies the moral will and is enriched by all good deeds, however wasted they may seem as efforts to redeem the world, is the expression of an infinite moral will, of whose striving for self-realization the world-process is the expression. This will is God. Of it and him our wills and minds are parts. What seems evil in it is merely an occasion for overcoming evil, and a testing of our power to overcome it. It is the necessary condition of the struggle, without which there would be no duties, no merit, no moral values, no good, and no God.

The World-Process the Self-Development of God. In *The Way Towards the Blessed Life or Doctrine of Religion*, Fichte continues in the lyric and mystical tone of the *Vocation*. In the first lecture, he points out that the world-process is an aspiration and a search for true existence. It has no true existence in itself. Hence love of the world

can never bring peace. Peace is only to be found in fixing our affections upon the eternal.

But how and where is the eternal to be found? Through thought and knowledge, Fichte replies. We must *know* the truth, must *know* God. By knowing the truth and contemplating the eternal our minds put on eternity and become one with the source and ground of all existence. In that knowledge the distinction between subject and object is overcome, and God is all in all.

Having in the second and third lectures defined the object of all true love and the means by which that love is consummated, Fichte turns in the fourth lecture to a defense of his position. The first objection that will be made arises from the difficulty of deriving the multiple, varied world from the One that underlies it. Fichte replies that the existent, in existing *in* itself, also must exist *for* itself. In the act of being, God, then, must represent to himself the existence of his own being. In this act of representation he becomes conscious. He *knows* that he exists. In a word, God's being, which is one, eternal and unchangeable, can be apprehended by him and become a "self" of which he can become conscious, only if it is characterized as a universe containing a plurality of selves and not-selves. In this way the many proceed from the One.

The Five Stages of Salvation. With an interlude of a lecture² squaring Fichte's view with Christianity, the rest of the work is devoted to setting forth the stages through which the finite self must pass in order to attain salvation. The path of knowledge leads us from sense-experience to a rational order pervading that experience, and then to an understanding of this order as a revelation of the being of God, and to an apprehension of the human mind that understands it as an image of the divine reason. Next, we see as in a glass darkly that our intellects are really one with the intelligible order upon which they reflect, and that the finite self is really one with God. Another step, and we see, as it were, the truth and God face to face, and gain in abandonment of our selves to God an immediate awareness of our unity with him. Upon this supervenes the fifth and final stage, the enjoyment of the Beatific Vision, in which the finite self is made one with God.

These five stages have their parallel in the practical and moral life. Freedom can only be obtained by living and experiencing them all. The sensible world, and the vision of Paradise that represents life after death in sensible terms, set up as the moral ideal a happiness founded on the natural life of man. The apprehension of an intelligible order

² Lecture VI.

in sense-experience is accompanied by a morality founded on reason, whose ideal is a Stoic calm and independence on external events. Both these ethics are uninspired and self-centered.

Ethics and the Inner Life. When, however, we understand that both our reasons and the rational order of the universe are the expression of a higher power, ethics becomes something warm and glowing. We are fired with the sense of a mission to perform, and in throwing ourselves into it and fulfilling it as best we can we find our happiness. But, even so, our ethics conceives the good as something lying in the future, to be attained by material accomplishments and "reforms" of one sort or another.

With the dawning sense of the unity of the finite self with God, our moral emphasis is shifted from worldly activities and ideals of material reforms, physical, social, economic and the like, to the inner life. We now perceive that our true mission is to live in the presence of the eternal and to enact it in our own selves. And finally, loving God with all our mind and all our soul and all our strength, we come by the moral path to the same Beatific Vision to which knowledge raised us. For God is love. He loves to exist, and he loves the world begotten by his awareness of his existence. And the world loves him in return, and we in our successive acts of reflection are impelled by love of him. "Love is therefore higher than all Reason; it is itself the fountain of Reason and the root of Reality; the sole creator of Life and Time—and thus," Fichte concludes, "I have finally declared to you the highest real point of view of a Doctrine of Being, Life and Blessedness—that is of True Speculation, towards which we have hitherto been gradually advancing."³

Contemporary Criticisms of Fichte. Besides the charge of atheism, which Fichte tried, as we have just seen, to refute, another objection to his system was made by his contemporaries and successors. He had reduced the non-ego, or nature, so they said, to a purely passive and negative creation of the ego. Such reduction was not true to experience. In experience nature does not appear as passive but as active, possessed of a highly complicated and highly dynamic structure, and endowed with a being and a power as real and as self-supporting as the being and the operations of the thinking subject. In experience the relations between the subject and the object are reciprocal, and object depends on subject as much and as little as subject depends on object. The body depends upon the soul no more than the soul upon the body.

³ Lecture X (trans. Smith, *Fichte's Works*, London, 1873), p. 539.

Being may lie in being experienced, but to be experienced a thing must be.

The ego, then, cannot be regarded as even logically prior to the non-ego. Nor is there any warrant for supposing it creates the non-ego. Both, rather, appear to be produced by something more profound than either of them—something to which neither the term “subject” nor “object” can be applied. This point was at once brought up by Schelling, Fichte’s friend and for a brief space his colleague at the University of Jena.

Chapter XVI

SCHELLING

I. LIFE

Influence of Fichte and Hegel. Friedrich von Schelling (1775-1854) was the son of a professor of Oriental Studies and Theology at Tübingen. He was early attracted by Kant and Fichte, and his earliest philosophical works were expositions of the latter's system, in which, however, he showed considerable independence of thought, and a growing interest in nature and science. This interest bore fruit in his *Ideas Regarding a Philosophy of Nature* (1797), and an essay *On the World-Soul* published in 1798.

That year he became a professor of philosophy at Jena, where Fichte still held a chair. He taught there five years, and quickly became the leader of the Romantic Movement in the university. Meantime he was becoming less and less sympathetic with Fichte's doctrine, and also with the view of Hegel, who was also teaching at Jena, and whose star was destined to be the brightest philosophic luminary of the nineteenth century. To this period belong further works on the philosophy of nature, his *System of Transcendental Idealism*, and his *Bruno*.

After leaving Jena, Schelling taught at Würzburg. His conceit made him many enemies there, as, indeed, it had at Jena. Eventually it got him into difficulties with the government. In 1804 he published a new statement of his philosophic views (*Darstellung meines Systems*) and other lectures in which he struggled with the problems raised by his criticism of Fichte and Fichte's criticism of him. From Jena he moved to Munich, where he lived quietly for the next thirty-five years. Shortly after his arrival, his work *On the Relation of the Fine Arts to Nature* appeared. After that he published little, but nevertheless went on developing his system.

In 1841 he was made a Prussian privy councilor and a member of the Berlin Academy, and began a course of lectures on the philosophy of religion. But, as his enemies succeeded in pirating the manuscript of his lectures before they were delivered and issuing them privately, Schelling abandoned the course. The nine last years of his life he

passed in philosophic silence, and it was not till after his death that his final views were published by his sons, in four volumes dealing with the philosophy of mythology and the philosophy of revelation.

II. REHABILITATION OF THE NON-EGO

Criticism of Fichte. Schelling's system takes off from his feeling that Fichte had reduced the non-ego, or nature, to little more than the bare presence in consciousness of a something-not-myself-I-know-not-what. It stood simply for the fact that experience had *objectivity* and thereby limited the amount of experience that I can call *me*. It was purely negative in character. Hence the Fichtean philosophy was without a cosmology. It not only failed to fit the operations of nature into the rest of its scheme, but it ignored them altogether.

The non-ego, however, Schelling insists, cannot be dismissed so lightly. An examination of the "external" experience we call the physical world reveals nature not as a mere passive limit to the activities of the ego, but as containing within herself an activity of self-limitation, similar to the self-limitation involved in self-consciousness. This activity is governed by a fundamental law of polarity, expressed in a struggle between the two forces of attraction and repulsion and in a resultant equilibrium. Matter, magnetism, electricity, chemical processes, light, and the fundamental activities of organic life are all manifestations of it. Furthermore, if we examine more deeply the self-limitation of the non-ego, we find that in physical nature, as in consciousness, we are dealing with a process that never absolutely fulfills itself and reaches its goal.

Again, there is a one-to-one correspondence between the stages of physical development, beginning with matter in its purely *quantitative* aspects, passing through its magnetic, electrical, chemical and luminiferous *qualities*, and culminating in the *vital* properties of organic bodies, with the successive *Anstösse*, or thrusts by which the ego develops self-consciousness. Finally, we may place the levels of both physical and mental evolution in a single graduated series leading from the lowest expression of the Real in spatial and material form to its highest expression in self-conscious spirit.

III. THE EVOLUTION OF THE NON-EGO AND THE EGO

The Law of Expansion and Contraction. Moreover, if we examine the higher, conscious expressions of the Real, we shall find that they,

too, obey the law of attraction, repulsion, and resultant equilibrium, displayed in natural processes. To exhibit this new link between the ego and the non-ego is the purpose of the *System of Transcendental Idealism*. The expansion of consciousness, Schelling tells us, rests upon the fact that there *is* consciousness. Pure and primal consciousness is simply a registration of its own existence. But even this blank act of registration of mere existence by pure consciousness is consciousness of *something*. In performing it, consciousness becomes an object unto itself, and is now *self-conscious*. Since the object of which it is conscious is simply itself, the limitation of the subject by the object, of the "I" by the "me," is an act of *self-limitation*.

Let us start with sensation. Consciousness is a process of expansion and contraction, and sensation is the equilibrium resulting from the conflict of these two forces. Sensations are data of consciousness because they represent an expansive, outgoing activity of the self. But being involuntary and uncontrollable, as well as limits upon creative activity, they show also that the outpouring of consciousness which gives rise to them is continually checked and balanced by the contraction and return of consciousness upon itself.

Objective Experience and Reflective Thought. The next step in the evolution of consciousness is *perception*, which turns sense-data into perceived *objects* and sets these objects over against the self as an *external world*. The sense of the *outsideness* of objective experience, as contrasted with the *insideness* of subjective experience, expresses itself as *space*; the consciousness of the self as something distinct from the spatial external world, whose activity is not one of running round in space but of sitting at a fixed point watching the world *go by*, gives us *time*. In so far as our experiences are abstracted from time and change and considered solely in their spatial aspects, we perceive *substances*; in so far as we emphasize their temporal and changing characteristics, we perceive *accidental properties*.

If, next, we analyze the implications of *causation*, we shall find that the effect determines the cause as well as the cause the effect. Hence the temporal sequence, in which the cause precedes the effect, and in which the properties of one substance seem to produce or modify the properties of another, is really an expression of a *reciprocal* relation and interconnection between the substances underlying these changes. Here, once more, we see expansion and contraction at work.

Consciousness, having developed blank sensation into physical nature, now proceeds to reflect upon the situation. In contemplating nature as a thing apart, it abstracts itself from nature, and begins to

reflect upon itself as the knowing subject and upon the *activity* of knowledge as something different from the *content* of knowledge. It now forms *concepts* and passes *judgments*. By so doing it differentiates its thoughts *about* objects from the objects themselves.

In thinking, as well as in perceiving, the law of polarity holds good. The expansive, creative power of the self, of which we are now aware, is still unable to make us *feel* that we create our universe. The universe is still a limit to our thinking, which contracts the self into a subject distinguished from its object. The ego and the non-ego remain for consciousness two independent and co-equal aspects of some underlying reality more profound than either of them in which their opposition is overcome.

IV. THE PRIMACY OF THE WILL

The Self-Determination of Moral Action and Artistic Creation. The nature of this reality Schelling, like Kant and Fichte, thinks is more adequately revealed in the moral life and in the will than it is in thought or in physical nature. The opposition, for example, between the *freedom* we experience within ourselves and the *necessity* that we run up against outside ourselves is overcome in the activity of *self-determination*. Here, we are, indeed, necessitated to act as we do by our own natures, but such determination, since it is inner, not outer, and is attended by no sense of external compulsion, means for us liberty of action. Furthermore, as we have just seen, we are forced to think of things as we do, not by any pressure exerted by the outer world, but by the constitution of the mind itself. Knowledge, also, is a free activity and is an expression of the general power of the self to determine its own behavior.

Again, in art we have another activity in which the opposition between conscious and unconscious creation is overcome. In the artist the self beholds itself as a spontaneous and untrammelled creator, whose works are not involuntary and uncontrollable, like sense-experience, but are self-imposed limits or goals. But such limitation is equivalent to self-determination and is attended by a feeling of freedom. Artistic creation shows not only how the inner limitations of one's own nature are compatible with liberty but also how in certain circumstances limitation from without is equivalent to freedom.

The Non-Ego a Limit to the Will, not to Knowledge. It is in the will again that the secret of our ability to attribute an external objective character to some of our experience is due. *All* sense-experience is

mine, is inside me. All of it conforms to the demands of knowledge, which is also *mine*, and *inside* me. But *some* of it does not conform to my *will*. On the contrary, *some* of it is *against* my will, thwarts me, and arouses repugnance. Sense-experience, then, is really external to my will, although it is still contained *within* my consciousness. It *is* experienced by me, but it *is not* willed by me.

Yet again, the necessity for a plurality of thinking subjects lies in the volitional part of our nature. The fact that I am *self*-determined is in itself a limitation. It restricts *my* will to what *I* desire. But I cannot be conscious of my individual will without a recognition of *other* individual selves and wills.

To contrast, however, my will and my individuality with another's, and thus to be self-conscious, presupposes a common theater of action. Hence that which seems to my experience to be external must *really* be external, if self-consciousness is to be explained. In this way the assumption that our private worlds present us not only with *similar* but with *identical* objects of experience is validated.

Moral Activity the Reconciliation of the Ego and the Non-Ego. In so far as the will is self-determined it obeys a law that it itself lays down. This law is the moral law, the categorical imperative. Here, once more, the process of expansion and contraction is exemplified in the distinction between motives inherent in the nature of the will itself and motives excited by the outer physical world. The moral problem is to harmonize these physical and worldly impulses with the moral law, and happiness depends upon such reconciliation. All individuals must undertake this task, since it is only by submitting their personal and worldly inclinations to the control of the categorical imperative that they can realize their freedom without interfering with a similar realization on the part of their fellow-men.

History, Schelling feels, is a continuous progress in the direction of perfect freedom. Its goal is the establishment of a condition of affairs in which the moral law shall remain supreme, and in which the opposition between freedom and necessity, between conscious volition and unconscious impulse, shall be overcome. Indeed, history is a progressive incarnation of God, who is not a person but a perfected world. At the same time, Schelling, like Fichte, maintains that the realization of the ideal would be suicidal, since the complete removal of limits and obstacles would spell death to the exercise of freedom, to which there may always be more and more but never a consummation and an end.

V. THE NATURE OF THE ABSOLUTE

The Absolute and the Ego and the Non-Ego. Schelling had one final problem on his hands—the problem of describing the nature of the underlying unity or *Absolute*, of which spirit and nature, the conscious and the unconscious, are both alike the manifestations. This question is taken up by him in his *Statement of My System*, and his *Lectures on the Method of Academical Study*. The Absolute is an infinite and eternal Reason, in which the conscious and the unconscious, the subject and the object, the ego and the non-ego are *identical*. The Absolute Reason is one. Outside of it there is nothing. Within it there can be no distinction or difference or division, since if there were, the Absolute would not be one and infinite. It would be, rather, a collection of finite beings. It follows that from the point of view of the Absolute the finite is not real but simply an appearance, and that the distinction and opposition between the conscious and the unconscious, spirit and matter, the self and the not-self, are illusions. Stated in terms of the law of attraction and repulsion, the Absolute is the point of *indifference* or absolute equilibrium in which the expansion and the contraction underlying the ego and the non-ego exactly balance and cancel each other. Here, then, we have a Reality transcending the opposition between idealism and realism and describable as *neither* subject nor object, mind nor matter.

This description of the Absolute was not enthusiastically received. Fichte denounced a Reality so conceived as absolutely dead, and pointed out that the names Schelling applied to it, like unity, totality, self-equality, and nothingness were without meaning. Hegel, who by this time was developing and expounding his own system, remarked that it was like the night, in which all cows are black.

The Derivation of the Ego and the Non-Ego from the Absolute. Schelling, like Fichte in the same situation, sought to make his meaning clearer, and to avoid the objections brought against him. Although the Absolute is transcendent and inexpressible in terms of finite existence, the appearance of the finite within the Absolute presupposes a tendency, a will, stirring at the heart of all being, to become existent and to assume the forms with which knowledge occupies itself. This impulse or will to existence is felt by us as an infinite living spirit manifesting itself in a finite universe. Its realization is a *free* process, which does not deny liberty to its creatures, but rather imparts its own freedom to them.

The fall of the Absolute into finite existence and the resultant world-process is necessary to the transformation of the original *indifference* of the Absolute, which is *neither* subject nor object, ego nor non-ego, into an *identification* of subject and object in a mystical unity which is them *both*. To this end the distinction between subject and object must be first developed in order to be ultimately overcome. In the course of transforming indifference into identity, the Absolute becomes a personal God.

The generation of God lends itself to expression in terms of Christian doctrine. From the Father, the *indifference* which is the ground of all existence, is produced the Son, in which the Father becomes conscious of his existence and forms an idea of himself. And this *self-consciousness* of the Father, which is the Son, reacts upon the *indifference* at the heart of the Absolute, and gives rise to the third person, the will to create. The will to create is a will to transform *indifference* into *identity*, the real into the ideal, and for this purpose the world is formed. The resultant universe displays throughout its length and breadth and in every part a conflict between the two forces of procession and separation from God, on the one hand, and of re-identification with him, on the other. In so far as there is a breaking away from God, there are individuality and self-assertion; in so far as there is re-identification with God, all things are submitted to universal laws expressive of God's will. The assertion of the individual against the universal is the ground of all that is disorderly and irrational in nature.

The Place of Evil in the Absolute. In man, the conflict between the two principles gives rise to the moral distinction between good and evil. Sin is a defiance of the divine will by the individual human will. But we must be able to defy God, and, generally speaking, the individual must be able to assert itself against the universal, if God himself is to be realized. Without such assertion there could be nothing for God to love, nothing for him to redeem, nothing separate from his will and from his self to reconcile and identify with himself. In short, the existence of evil is a necessary condition of the divine self-realization, the final act of which is accomplished in the Incarnation.

But if God wills evil for the sake of his own self-fulfillment, how can he be absolved from responsibility for it? Evil cannot be dismissed as negative, since the self-assertion on which it is founded is a positive defiance of the universal will. To this difficulty Schelling replies that without the opposition upon which evil rests, there can be no self-consciousness and no self-realization of the Absolute. The Absolute is no less perfect for having to realize itself in evil ways.

Chapter XVII

HEGEL

I. LIFE

Education. We have already noticed that teaching philosophy at Jena, along with Fichte and Schelling, was a professor named Hegel. Though five years older than Schelling, he was slower in arriving at his philosophic maturity. But his system was destined, when completed, to dominate the nineteenth century, and to display its author as the most profound and the most brilliant thinker of that epoch.

George William Frederick Hegel was born in 1770 at Stuttgart, the capital of Württemberg, where his father occupied a minor government position. His schooling he received at the *gymnasium* of his native town and at the theological seminary at Tübingen. As a student, he seems to have attracted little attention. He was an ordinary, healthy, genial, good-humored youth, indistinguishable from the run of his fellow undergraduates. He disliked, moreover, the dullness of his teachers, and had frequently to be reprimanded for cutting his classes. He was, however, sufficiently to the fore to help his friend Schelling found a republican club devoted to discussing the ideas of the French Revolution and the unrest generated by it throughout Western Europe. He had also formed the habit of taking copious notes on everything that interested him. At the moment, his chief interest lay in classical literature, and especially in the tragedies of Sophocles. He hated the Romantic Movement and emotional extravagances of all sorts. His interest in philosophy was as yet dormant.

Philosophical Career. The next six years were the period of his philosophic awakening. These he spent as a private tutor, first at Berne, and then at Frankfort. Particularly, he studied and revolted against Kant. His theological education—he was destined for the church—and his enthusiasm for classical culture, and especially for Greece, were also contributing to the ferment of his spirit. He was also much attracted at the moment by the philosophical views set forth by Schelling. He sympathized especially with his friend's criticisms of Fichte, and with his idea of the Absolute as an *identity* of the ego and the non-ego. His

first published work, indeed, was *On the Difference between the Systems of Fichte and Schelling* (1801). These sympathetic relations led in 1802 to a year's collaboration with Schelling in getting out a philosophical review, the *Critical Journal*, which he continued to edit, after the latter left Jena.

From now on, Hegel's rise was rapid. In 1803, he was made a *privat-docent*, and two years later a professor at the university. He was also rapidly developing his own views and coming more and more to disagree with his former collaborator. The period bore brilliant fruit in his *Phenomenology of Spirit*, published in 1807.

Before its publication, however, the victorious advance of Napoleon's army had forced him to flee from Jena. After a brief period at Bamberg, he settled down for the next eight years as a schoolteacher in Nuremberg, where he married and where his two sons were born. Here, too, his *Logic* first saw the light of day.

In 1816 he was offered and he accepted a professorship at Heidelberg, and in another two years moved on to Berlin to occupy the chair left vacant by Fichte's death. Here he spent the rest of his life, devoting himself to his lectures and his writings. The *Encyclopaedia of Philosophic Sciences* appeared in 1817, the *Philosophy of Right* in 1821, and the lectures given between 1823 and 1827 form the basis of his *Aesthetics*, *Philosophy of History*, *Philosophy of Religion*, and *History of Philosophy*. A band of disciples was fast gathering about him, and he was the recipient of many public honors—all of which was gratifying to his growing conceit and self-importance.

The first European cholera epidemic struck Berlin in 1831. Hegel moved his family out of town for the summer and devoted himself to revising the *Science of Right*. In the autumn, however, he returned to Berlin. He was suddenly taken ill with cholera, and a day later—November 14, 1831—was dead.

II. EARLY VIEWS

Enthusiasm for Freedom. The six years spent in tutoring and meditation immediately after his graduation had given Hegel the two leading ideas of his system. Like all young revolutionaries, he was inspired by the idea of *freedom*, and the idea had been strengthened in him by his Protestant theological training, with its opposition of the inner to the outer life, of conscience to external authority, and of the right of private judgment to the curbs upon thinking and upon action imposed by the Roman Church.

This enthusiasm for *freedom*, at first defiant and individualistic, became reconciled with social compulsions by Hegel's study of Rousseau and Kant. At the same time, he rebelled against the abstract character of Kantian morality. He revolted also against the ethics of the Old Testament, which seemed to him to rest upon commandments imposed externally upon man from on high and to give to morality an unhealthy and unnatural basis. Christianity, too, in its official forms he found unsatisfactory. It tended to segregate religion from life, to oppose the world to the spirit, and as a result to vacillate between the two. Greek ethics was in his opinion best, with its idea of destiny as governing a man's life not from the outside but from within, as part and parcel of himself. He would have agreed with Heraclitus that a man's character is his destiny. And he saw a great wisdom in the Hellenic ideal of moderation and restraint, and in the Hellenic sense of the necessity of submitting human life to the restrictions laid upon it by the structure of the natural order of which it is a part. Man conquers nature by obeying her. But his essential victory is not the Baconian one of practical advancement. It has a deeper, spiritual sense. It is found in a triumph over his destiny, which consists in accepting with joyful resignation the renunciations his fate exacts from him. Not to rebel against life, but to love it as it is, with all its limitations and vicissitudes, is to overcome fate and to transmute it into freedom.

Revolt from Fichte and Schelling. Hegel's second principle, in which we can see the influence of Schelling's idea of *identity*, and of Fichte's influence behind that of Schelling, is that life is an organic unity, a spiritual activity, in which all seeming antagonisms between man and nature are overcome, and the clash of opposing forces is stilled. Multiplicity, variety, opposition, antagonism, are all subservient to some higher principle in which they are ultimately identified, and to whose being—which is an activity of reconciling and fusing them—they are necessary.

Where is such a principle to be found? It was in answering this question that Hegel broke completely with Fichte and Schelling and incidentally completed the demolition by the German idealists of those parts of the Kantian system that they deemed superfluous. Fichte, we may recall, although he dispensed with the objective things-in-themselves underlying and provoking the sensible manifold and made the thinking subject the source of the content as well as of the forms of experience, nevertheless had retained a subjective thing-in-itself in his doctrine of the Absolute Ego. This Ego was something more than either the finite ego or the non-ego which it produced through the

finite ego. It remained a kind of *substance* which *underlay* the finite ego.

For Schelling, too, the Absolute preserved the character of a Kantian thing-in-itself. It was neither an ego nor a non-ego, but something that transcended them both—a primal *indifference* out of which ego and non-ego arose in the course of transforming indifference into identity.

III. THE NATURE OF REALITY

The Absolute Is the World-Process. Hegel in his criticism of Fichte and Schelling simply knocked out altogether the idea of an absolute *subject* underlying experience and creating it out of the unfathomable depths of its being, just as they had knocked out the idea of an absolute, unfathomable *objective* source of experience. Schelling's Absolute, the night in which all cows were black, was in Hegel's opinion a purely negative quantity—an absence of all predicates. But if the Real is indescribable in any of the terms placed at our disposal by experience and thought, then we might as well abandon philosophy at once and for good and all. Furthermore, if the Real is *not* anything it seems to be, we have also on our hands the problem of explaining where all these things the Real is *not* come from. Certainly, the Real cannot account for their existence and their nature, and the whole world of experience is left hanging, with nowhere to come from and nowhere to go.

Moreover, any system, idealistic or realistic, that *opposes* Reality to appearance and denies to the Real its *experienced* characteristics turns the Absolute into a negation pure and simple, devoid of all perceivable and thinkable properties, and therefore the equivalent of nothing at all. But the least demand we can make upon the nature of the Real is that it shall *account for* appearance, and *explain* the multiple, varied, changing, kaleidoscopic spectacle of existence.

However, to explain experience the Absolute cannot be outside of, or above, or below experience. It cannot exist in any way *apart* from experience. It cannot be an Ego or a Mind whose thinking creates the world. An Ego or Mind apart from its thinking is nothing. An Absolute Ego or Absolute Intellect is simply the conscious *process* of experiencing and thinking, no less, no more. The Real, then, is a *Process*, not a substance. The sum of all that is experienced, then, tells all there is to know about the nature of the Real. The Absolute *is* the world-process, just as I *am* my career. The Absolute is a *life* and nothing more, just as I *am* my life and nothing more.

The World-Process Is a Career. But a career, or a life, has *cohesion* and *form*. Its totality expresses the development of a single self, and all its episodes are somehow taken up and worked together into a single coherent whole, just as the episodes of a novel flow together to form a single consistent plot. There is no moment and no incident in it that is not given significance by the nature of the process of which it is a part. In the same way the world-process is the living out, the making explicit, of a plan or character inherent in its evolution, which Hegel calls the Absolute Idea. But *self-realization*, if it is to have any meaning, implies *self-consciousness*. The Absolute Existence, which realizes and makes explicit the Absolute Idea, must therefore be conceived as a process of evolving self-consciousness, culminating in complete self-knowledge, or comprehension of the Idea which its development sets forth.¹

Such complete self-knowledge becomes an intelligible and attainable ideal the moment we discard the antithesis between subject and object, mind and matter, thinking and being. *Thinking* and *being* are one and the same activity. I *am* what I *think* myself to be. Subject and object are identical. Complete self-knowledge consists in a conscious realization of that identity, which is, by virtue of the oneness of thinking and being, also an *act* of identifying the one with the other. The Absolute, then, may be defined as an Idea or Plan becoming conscious of itself. Or, to use a single term to express the process of self-consciously realizing an idea, we may say that the Absolute is *Spirit*.

Spirit and Nature. In the living, pulsating, self-realizing activity of Spirit there is no actual distinction between the Idea and the process of its self-fulfillment. However, for the purposes of philosophy we may conveniently separate the *logical idea* of things, which defines the possibilities of thinking and experiencing and therefore of existence, from *nature* in which those possibilities are given realization, and the form of the Absolute is given a concrete filling. When, however, we separate in our thinking form from content, we make the content *other than* and *external to* the form, and distinguish the several elements or parts of the content from one another, as spread out in *space* and *time*. At the same time we recognize the interconnection of the parts as *causality*. And finally we oppose our inner consciousness to an *outer world*.²

The distinction between Spirit and nature confronts us with an interesting situation. On the one hand, consciousness seems to evolve out of nature by a process of gradual rise and development from the

¹ *Phenomenology*, Preface and Introduction.

² *Encyclopaedia, Philosophy of Spirit (Mind)*, § 382.

inorganic, through the *vegetable* and the *animal* forms of organic life, in which an inner principle of growth realizes itself, and subordinates the special functions and purposes of the parts to the larger life of the whole, till it reaches the level of conscious thought.³ At this point it reduces nature to terms of its own *experience* and turns natural events to its own uses, and then reflects upon that experience, and by so doing transforms nature into an intelligible order, in which the Idea is completely expressed.⁴

On the other hand, instead of Spirit developing out of nature, nature, being the experience of the Spirit, is produced by the Spirit and given by it her form and structure in the categories of thought. In thinking of itself as produced by nature, the Spirit is merely tracing the successive steps by which it itself produces the world. Its appearance in the bosom of nature is really its return to itself, its recoil from the creation of the universe within itself.

The Human Level of the Self-Realization of Spirit. In human consciousness the self-realization of the Spirit reaches higher levels. When we reason and reflect, the Spirit rises above, negates, and transcends its individual enactments, although it still uses the individual as a base. It is, to be sure, *we* who do the reasoning and the reflecting, but our thinking occupies itself not with the particular but with the universal, and becomes impersonal or superpersonal in its interests and its significance. We tend to lose consciousness of ourselves in contemplating the truth.

Moreover, at the human level the Spirit becomes conscious of its *freedom*. It realizes that its seeming dependence upon the external world and its apparent determination by the law of causation are in reality a captivity to circumstances and rules of which it itself is the author and which it freely imposes upon its own existence.

But, however high the Spirit may soar in human thought, it can never attain complete self-realization and self-knowledge in any finite experience. To reach those final peaks it must transcend and overcome finitude completely, and become Absolute Spirit. In a sense, however, we constantly are negating and transcending our finitude just in recognizing and knowing it. The very act and fact of thought is a recognition that the scope of our thinking is wider than its finite base and content and is capable of embracing the whole truth, or Absolute Idea, which it is forever striving to encompass.

³ *Encyclopaedia, Philosophy of Spirit (Mind)*, § 382. Cf. *Phenomenology*, C. V. also A, a.

⁴ Cf. *Phenomenology*, A, I, II, III.

IV. SUBJECTIVE SPIRIT

Sensation, etc. If now we analyze the stages of the self-realization of Spirit more closely, we shall find that they are three, *subjective*, *objective*, and *absolute*. Under subjective Spirit we may first of all group the consciousness we share with the animals and the pre-conscious natural activities of the organism. Sentience, once awakened, means first the presence of immediate, particular sensations, not as yet referred to external objects. So, too, accompanying these first sensations are feeling-values in which the Spirit begins to sense its own being, without as yet attaining real self-consciousness.

The Spirit has now become an *attitude* towards its content. In reacting to its experience the Spirit claims its sensations and feelings as its own. But as yet there is no reflective self-consciousness. Nevertheless, the experience of the individual is acquiring a unity and a significance that transcend any particular moment. Through memory, association, and habit, the nascent self is being slowly freed from slavery to each new and separate sensation, is being fortified against the desires of the moment, and is developing a level of consciousness upon which thinking may be based. Subject and object are now fairly clearly distinguished, and the conscious organism asserts itself as a unified entity different from the rest of nature and possessed of a fixed constitution of its own.

Reflection upon the Ego and the Non-Ego. The Spirit has now laid the foundations for self-consciousness. Hitherto it has been busy developing the *content* of experience, without, however, having become clearly aware of the *operations* by which that content is evolved. Now it begins to consider its creative *activity*. This step is of vital importance. It is an indispensable condition, not only of the emergence of self-consciousness, but of the later abolition of self-consciousness in Absolute Spirit. For the Spirit by mere *willing* cannot master the physiological processes and involuntary experiences and reactions of its own body. To absorb the body and the external world into itself, and to reduce them to its own experience, the Spirit must reflect upon them, and rationalize them, and prove that their seeming externality cloaks a situation of its own creation. But such reflection and rationalization involve a consideration of the *act* by which the creation of experience is brought to pass. In other words, they provoke reflection upon themselves, as something different from their work.

The Spirit now enumerates to itself the stages through which it

has passed: *sensation*, or the mere unwillful presence of experience; *perception*, in which floating sensations cohere as *things* upon which the attention is focused; and *understanding*, by which universals are abstracted from *things* and regarded as constituting their essences. Accompanying all these operations goes the "I think," the Kantian "transcendental unity of apperception," which encompasses my sensations, perceptions, and thoughts, and makes them part of one and the *same* world, and that world *my* world.⁵

The Recognition of Other Selves. But for the Spirit to recognize *itself* is to recognize also something that is not itself, and to draw at last a clear-cut distinction between *subject* and *object*. Furthermore, the *object* now presents itself as in part, at least, a world of other selves. Such a non-ego, comprising other egos with whom we can contrast ourselves and with whom we can communicate, is necessary to the Spirit's complete self-realization.⁶

These selves, although they exclude one another, figure in one another's experiences as *objects*. Furthermore, although each has its particular experience and world, all share a common experience and world. We live, as we say, in the *same* world, perceive and think about the *same* objects.

It is the myriad individual yet intersecting worlds of experience thus constructed which we must now seek to combine in some larger unity that will appropriate them all as *its*, just as I appropriate as *mine* all the different moments and aspects of my experience and all the different attitudes and acts of my self-consciousness towards its content.

Now, we can detect in ourselves Spirit in the act of building up this unity, in which the opposition of the ego to the non-ego is overcome, and can trace the steps by which the work of reconciliation is carried on. In the first place, the ego *likes* the non-ego, and draws from it much of its satisfaction and self-expression. Here, then, is a kind of identity, an identity of *interest*, binding together the subject and the object into a larger whole.

The Appearance of Social Consciousness. But this relation is one-sided. I like and desire the non-ego because it panders to my selfish interests. The non-ego is for me something to be exploited and to be enslaved to my own caprices. When, however, the non-ego is recognized as containing other *selves* like our own, the situation is broadened. The non-ego asserts its claims to be treated not merely as a means but as an end in itself, and my life, instead of battenning upon

⁵ Cf. *Phenomenology*, A, I, II, III.

⁶ Cf. *Phenomenology*, B, IV, A.

the outer world at will, has to recognize the existence of other individuals and to meet with opposition from them when its desires clash with theirs. *Self-consciousness* has now become *social consciousness*.⁷

Still, in its primitive form social consciousness is a consciousness of *opposition*, of conflicting and clashing wills at war with one another. This opposition can be completely overcome only by a self-conscious and voluntary identification of the private with the public self, and of the individual with the common interest. Meantime, however, a partial reconciliation is effected by the institutions of society and the state. By them the clash of individuals is, indeed, largely prevented, but prevented by means in which the individual does not as yet wholeheartedly acquiesce. Social organization, therefore, seems to exert *compulsion* upon individuals and to *force* them to conduct themselves in a way that is still against their will and a limitation upon their freedom.

V. OBJECTIVE SPIRIT

We have now reached the point where the transition from *subjective Spirit* to *objective Spirit* takes place. *Objective Spirit* is the fund of common objects, common interests, and common activities, which the Spirit has created in the individual experiences of different self-conscious subjects. In this way different individual worlds are given a single focus, and the experience of each separate self *means* a universe larger than itself and shared with other selves.

The passage from subjective to objective Spirit opens up new fields of reflection. The Spirit now meditates upon the human race rather than upon the individual. It thinks about the organization of society, about its origins and development, about the principles underlying social conduct. The result is the formulation of philosophies of society, of law, of morality, and of history.

The appearance of objective Spirit, moreover, reacts upon the individual subject, and turns him at last into a *rational* being. Only in society can we live the life of reason. For reason means an identification of the individual with the universal in which the universal is found to explain and perfect the particular. So, too, to act as a reasonable being is to act in a moral and social manner. Moral conduct is rational conduct. The anti-social and immoral individual is an irrational individual.⁸

We turn now to consider the nature and the conditions of the *rational*

⁷ Cf. *Phenomenology*, B, IV, A. B.; BB, VI, A.

⁸ *Phenomenology*, C, V, B.

activities of *Spirit*, made possible by the attainment of *objective Spirit*. Here again we have three aspects. In the first place, we have the processes of rational thought or *theoretic Spirit*. The conditions of reasoning turn out to be very like those of self-consciousness. We begin with *intuition*, in the Kantian sense, which in its turn is a triad of blank sensation, attention, and apperception. The intuited data are remembered, imaged, and reproduced—another triad, whose unity gives us *representation* and turns sense-experience into a world of perceived *objects*. Finally, we have the stage of thought, in which objects are understood, judgments are passed upon them, and we begin to reason about them.⁹

The second aspect of rational life is that of *practical Spirit*, or reason expressed in terms of desire, volition, action, and the like. Finally we have *free Spirit*, in which the theoretic and the practical are united in rational self-determination. With the free Spirit, to know the good is equivalent to willing it.

VI. ABSOLUTE SPIRIT

The Ultimate Syntheses. We rise now to the final level of spiritual development, that of *Absolute Spirit*. In the Absolute Spirit, the complete union and reconciliation of all the differences and distinctions manifested in the world-process take place. The absolute experience is made one with the absolute Idea. The opposition of form to matter, of subject to object, of self to the not-self is transcended, and the world-process is transfigured into the self-conscious life of the Absolute, which is both its own subject and its own object fused into a single completely harmonious Reality.

Once more it is by three steps that we rise to the heights of absolute Spirit. These are provided by *art, religion and philosophy*. In art, to be sure, we still have, in the difference between the artist and his work, a persistence of the distinction between subject and object, the Spirit and nature. But this opposition is already being overcome, since the artist's work appears as the creation of his genius and the expression of his purpose; or, to put it more generally, the object appears as the free creation of the subject, and nature as the product of the Spirit. Moreover, the natural, objective element is subordinated to the subjective, spiritual factor. The work of art is dominated by the Idea, and translates the Idea into sensuous terms. A fine statue or a fine picture,

⁹ *Philosophy of Spirit (Mind)*, §§ 444-469.

for example, are not imitations of nature. They are re-arrangements of nature which deliver the spiritual values and meanings with which she is pregnant.

Art. Art takes on the characteristic triple form. We have *symbolic art*, where the form employed is not adequate to the idea it seeks to express, and succeeds only in symbolizing the Idea. There is *classic art*, in which the natural form is regarded as completely adequate to express the Idea—which in the nature of things it cannot be. The defect of classic art lies precisely in its failure to realize that the Idea is transcendent and that no sensuous representation is able to manifest it in its entirety. Finally, there is the *art which synthesizes and rounds out the symbolic and the classic*. In this art the form, though an inadequate expression of the Idea, still succeeds in grasping and conveying it, so that the sensuous representation means and pictures the Idea to the beholder. Indeed, all beauty does precisely this. It is the sensuous body, so to speak, of the Spirit, in which the nature of the Spirit is indicated.¹⁰

Religion. In religion the synthesis of experience and the Idea is carried still further. Objective nature now becomes the manifestation of a companionable Spirit or self, akin to our finite selves, in whose image we are created. And her processes are interpreted as the workings of its purpose. Once more there are three aspects to religion—three ways of conceiving God. We may regard him as a pure unity, an abiding, changeless, eternal being transcending the world, and existing apart from it. This is exemplified by the Christian concept of the Father. Or we may conceive him as incarnate and immanent in the phenomenal world, or in Christian terminology, as the Logos or Son. Or we may look upon him as a return of the finite to the infinite, of variety into simplicity, of the many into the one, there to come to rest and to be fused and perfected. This aspect of God we may call the Holy Spirit.¹¹

Philosophy. Philosophy, however, soars higher than religion. Indeed, she is the final synthesis of the attitudes taken respectively by art and religion. She combines art's glorification of the finite Spirit as a creator with the assertion of religion that the finite Spirit is itself a creation of Absolute Spirit. In this way she effects an identification of the finite with the absolute. Yet again the eternal triad appears. In regarding the return of Spirit into itself, we can start at any one of three points in a circle. We can have a philosophy that begins with a logical *form* or

¹⁰ Cf. *Phenomenology*, CC, VII, B.

¹¹ Cf. *Phenomenology*, CC, VII, A, C.

Idea developing itself through nature into Spirit. Or, taking *nature* as our starting-point, we can see her developing the Spirit as a means towards assuming a rational form. Or, initiating the process with *Spirit*, we can watch Spirit realizing its form or idea in the evolution of nature.¹²

VII. LOGIC

The World-Process Governed by the Laws of Logic. We have now seen the Absolute becoming subjective and objective Spirit, attaining self-consciousness, diversifying its career with an infinite wealth of adventure, and, at the end, gathering again all the richness of its infinitely various and multiple experience into one, in its return upon itself as Absolute Spirit. These episodes, though they are unrolled before our finite eyes in temporal succession and as a progressive evolution, are in the Absolute raised altogether above time. In it they are all there all at once, a vision of itself under the aspect of eternity, in which the stages displayed to us in time appear as a simple analysis of all the levels and kinds of existence of which an absolute experience is capable, and of which it is the eternal and complete enactment. It is to a description of these levels and kinds of existence that Hegel turns in his *Logic*, X-raying, as it were, the flesh and blood of the Absolute, pictured in the *Phenomenology of Spirit*, and disclosing the skeleton about which the World-Process is built and by which it is supported.¹³

The Hierarchy of Syntheses. This skeleton is constructed of a series of superimposed ascending triads in which the seemingly antagonistic concepts revealed in experience by the *understanding* are reconciled and combined, or in Hegel's own phrase, *aufgehoben*, "taken up," by *dialectic* in higher logical concepts. These, in their turn, are finally united by *speculation* in a supreme synthesis in which all differences and seeming contradictions are fused and explained.

These syntheses do not evolve in time. They are rather derived from one another by logical implication, and form a logical hierarchy culminating in the all-embracing, all-reconciling Absolute Idea. The hierarchy is complicated and has many ramifications, and in it lower syntheses frequently re-appear on higher levels. Since *being* and *thinking* are identical, the laws of thought codified by logic will make manifest the constitution of the Real. To discover, then, the structure of the Absolute we have only to analyze our own mental processes and categories. Hegel's analysis is, however, so minute, so technical,

¹² Cf. *Phenomenology*, DD, VIII.

¹³ The discussion here is based upon *Encyclopaedia (Logic)*.

and so lengthy, that we can do little more here than describe its general features and results.

VIII. THE BASIC TRIADS

Being, Not-Being and Becoming. The most all-embracing concept of our minds would seem to be that of *being*. It is the least common denominator to which all things may be reduced. But pure unspecified *being* without a particular content of some sort is equivalent to nothing at all. It is indistinguishable from *not-being*. To assert, then, as a *thesis* that the Absolute is unqualified *being* is also to assert the *antithesis* of our statement, and to say that the Absolute is non-existent.

Can we then find some further concept that will overcome this contradiction and prove to be a *synthesis* of the ideas of *being* and *not-being*? Hegel finds such a concept in that of *becoming*. When a thing *changes*, it *is* what it *was not* a moment before, and it *will be* in another instant what it *is not* now. But, if it is to remain the *same* object throughout its changes, what it *is* must be somehow *identical* with what it *was not*, and with what it *will be*. In a *process*, then, the seemingly mutual exclusion of *being* and *non-being* by each other is overcome in a higher synthesis.

Since Hegel's Absolute is a Process and a Career, the concept of *becoming*, in which relative *being* and relative *not-being* are continually being related, *aufgehoben*, and synthesized, is the fundamental concept of his philosophy. It reveals, too, more clearly the ultimate *triad*—and with the threefold measure in which his thought is always appearing we are already familiar—to which everything that exists is reducible. *Thesis*, *antithesis*, and *synthesis*—these mark all movement, all change, all life, all thinking. *Becoming*, then, is the first *living* notion.

The Concept of Becoming. Let us examine further implications of *becoming*. We cannot think of *change* without also thinking of *quality*. For *change* is a play of qualities that come and go. Again, since there would be no change without a diversity of qualities, we cannot entertain the concept of *becoming* without also entertaining that of *diversity*. But this diversity must be strung on a *single* thread, for otherwise we should not have real *change* but rather the *substitution* of one episode by another in which there was no connected history. Hence, in thinking of *becoming*, we must also think of identity, and *singleness* or *unity*, as well as of *difference* and *multiplicity*. Furthermore, the concepts of *identity* and *difference* and of *unity* and *multiplication*

are pairs of Siamese twins, in which the one cannot be severed from the other.

When, however, we think of the *quality* of *oneness* or *unity*, we are also thinking of a *unit* or of the basis of all *quantitative* measurement. In other words, we pass from the category of *quality* to that of *quantity*. But we find at once that the idea of *quantity* gives rise in its turn to that of *quality*, since it is applicable not only to spatial magnitudes but to *degrees* of intensity. But *intensity* and *degree* are meaningless except with respect to *quality*. Hence, the two concepts, although antithetical, are *synthesized* in the concept of *measure* or of the *amount* of quantity a thing contains—the amount being also a *quality* of the thing in question.

But *quality*, *quantity* and *measure* make no sense without the concept of *something* that possesses these characteristics. In short, there must be a subject or *essence* underlying them, of which they are the predicates or attributes.

IX. ESSENCE AND ITS IMPLICATIONS

Essence, Existence, and Change. In arriving at the concept of *Essence*, we have revived the concept of *being* and raised it to a higher level. Blank *being* has become *something*, and, in acquiring properties that define it, has become determinate. *Essence*, then, may be described as *being* determining itself to be *something*, and thereby negating and abolishing itself as bare indeterminate existence.

Nevertheless, we still distinguish the *essence* of a thing from its *existence*. Furthermore, we identify its *essence* with that which persists and remains the *same* throughout its changes, and thereby we create an opposition between *appearance* and *reality*. Finally, taken in connection with the idea of *essence* the concept of *becoming* seems to fall into hopeless self-contradiction. How can one and the same thing *really change* and yet remain *identical* with itself? Obviously we have here a number of pairs of *theses* and *antitheses* that call for a new *synthesis*.

The Syntheses Effected by the Concepts of "Ground" and "Force." This synthesis is found in part, Hegel feels, if we consider the essence the *ground* or *reason* for appearances. The reason or ground of an object or event is merely the object or event itself more completely understood. The chemical constituents or grounds of a phenomenon, for example, are merely an analysis of the phenomenon in question. In the same way all *appearance* is merely the logical outcome of its

reasons and the manifestation of its ground. *Appearance*, then, is not opposed to *reality*.

In the same way another paradox to which the concept of *essence* gives rise—the necessity of thinking of it as a *whole* determining the nature of its *parts*, and at the same time as composed of *parts* determining the nature of the *whole*—is overcome in the concept of *force*. For a *force* is the equivalent of its expressions and identical with them. Its manifestations are not derived from it by dividing it, nor is it built up out of them.

Actuality, Potentiality and Fact. Nevertheless, the concept of *force*, though it may overcome the contradiction of *whole* and *part*, at once itself suggests the opposed concepts of *actuality* and *potentiality*. These concepts, however, are found to involve one another, since bare potentiality cannot be conceived without reference to the specific, actual thing it makes possible, and a floating actuality, divorced from that which makes it possible, would be a chance, *inexplicable* event, which our minds would refuse to accept as such.

This opposition is overcome in the concept of *fact*. For the conditions under which any fact *actually* occurs are also the conditions that render it *possible*. A *fact*, then, in being *actual* does nothing but express the *possibility* of its occurrence. Indeed, it may be defined as simply an actualization of all those potentialities that render its particular actualization possible. It is, then, a *synthesis* of the *possible* and the *actual*. It is its own potentialities realizing themselves.

X. THE RECONCILIATION OF FREEDOM AND NECESSITY

The concept of *fact*—that is, of *existence* plus a *measure* of *quality* and *quantity* that gives it a determinate character or essence; plus *identity* and *difference*, which enable it to grow and develop; plus a *reason* or *ground* for being what it is of which its *appearance* is the complete manifestation; plus a dynamic activity or *forcefulness* whose whole nature is expressed equally in its several expressions or *parts*; plus an *actuality* that merely absorbs, conserves, and realizes the potentialities that make it possible—suggests yet another example of *thesis* and *antithesis*.

On the one hand, we must conceive all facts as *necessary*. Given all the possibilities, the fact *must* emerge. What is, *must* be, because the conditions that enable it to exist could not produce any other fact.

On the other hand, facts have to be conceived as *free* events. For if we ask *why* certain possibilities should give rise to certain facts and

to no others, we can give no reason and find no cause for the connection in question. We can only answer that it is the nature of things that certain events should have the effects they do. But since nothing outside it forces the nature of things to be what it is, and to exhibit itself in the specific realizations of potentiality and causal linkages it does, that nature *freely* and of its own self-determination establishes what shall cause what, and how possibilities shall be realized.

Such a situation, however, creates no opposition between the *freedom* and the *necessity* of the *fact*. On the contrary it synthesizes them and establishes their identity.

XI. THE RECONCILIATION OF SUBSTANCE AND ACCIDENT

When, however, we speak of a "nature of things" underlying and *freely* expressing itself in the *necessary* order and connection of events, we are thinking once more, though on a higher level, in terms of an *essence* and its *properties*. And we now are confronted with the thesis and antithesis of *substance* and its *attributes* or *accidents*. The difficulty here is that the substance both is and is not its properties. Take away all its properties and nothing is left, and yet we persist in thinking that something still remains. Otherwise, we should not be able in thought to distinguish the notion of *substance* from the idea of the sum of the attributes supposed to *inhere* in substance.

The difficulty, however, is overcome if we regard *substance* as the *cause* of its *attributes*. For a cause is a *cause* only in so far as it gives rise to an effect. And in producing the effect it loses nothing of itself. Conversely the effect is already *all there* in its cause, potentially present in the sum of the conditions that enable it to come into being. Otherwise the cause could not produce it, nor would the conditions in question be the potentialities of *its* existence.

Applying the relation of *cause* and *effect* to *substance* and its *attributes*, we can understand how a substance is completely exhausted by the properties that manifest its nature, but is at the same time *more* than those qualities, just as cause and effect, though completely present in each other, are nevertheless *different* from each other.

XII. THE SYNTHESIS OF EFFICIENT AND FINAL CAUSATION

Difficulties of the Concept of Mechanism. The concept of causation, however, involves us in another difficulty. It seems to imply an infinite regress in which no first or ultimate cause can be found. Such a

regress can be avoided only if in our search for the cause we *progress* instead of *regress*, and make the so-called effect the cause of the so-called causes leading up to it.

Kant had pointed out that we seem actually to have causation of this sort, or in other words *final*, rather than *mechanical*, causation in the case of organic bodies, and of the *purposive* activities of conscious life. In organic bodies, we seem to have a *reciprocal* situation, where the whole, although built up out of parts, nevertheless seems to determine the relations of the parts to one another and to itself. Or again, in conscious purposive activity the end brought to pass by certain means also determines the means employed to accomplish it. And Hegel himself had insisted that the institutions and the character of a people *reciprocally* influence each other. Can, then, the concept of *reciprocity* be applied to the infinite regress of efficient and mechanical causation? In short, can the seemingly *mechanical* character of most of the world-process be regarded as really *organic*?

Difficulties of Conceiving Purposes as Causes. Kant, it will be remembered, had dealt with this question very cautiously, declaring that there was no *a priori* impossibility of a purely mechanical explanation of teleological phenomena, that final causation was undemonstrable even in the case of organisms, and that experience warranted no more than the assertion that the *representation* by the mind of a completed whole or of a goal ahead could cause the arrangement of the parts or the means for attaining it.

Moreover, if we examine the concept of *final* causation, we find that we are confronted with the difficulty of an infinite regress in reverse. Just as looking backward we could discover no *first cause* to the process of efficient and mechanical causation, so in looking forward we can discover no *final goal* to the process of final causation. Each end attained turns out to be the means to some further end, just as each efficient cause turns out to be the effect of some preceding cause. Can we, then, find any way both of avoiding the difficulties of *infinite regress* and *infinite progress*, and of synthesizing efficient and final causation in a concept that will embrace and harmonize them both?

Identity of Means and Ends. These difficulties can be overcome and the synthesis attained only if we can succeed in first synthesizing the *end* and *means* presented in *final causation* in the same way that we synthesized *efficient cause* and *effect*. We amalgamated efficient cause and effect by showing that they were not *external* to each other, but were two expressions of an underlying principle that was equally *both* cause and effect. In the same way, end and means might be conceived

as two manifestations of an underlying principle that was *both* its own end and its own means.

Such a principle would be self-realizing and at the same time realized in and by the very process of self-realization. Neither end nor means would be external to it or distinct from each other. Since, then, both final and efficient causation present precisely the same problem, which is solved in precisely the same way by invoking in either case an identical principle, they may themselves be regarded as identical at heart, in spite of their outer contradiction. But, if they are both identical at heart, there can be no real contradiction between the mechanical, efficient causation of a whole by its parts and the teleological, final causation of its parts by a whole.

There is, moreover, yet another way in which the contradiction between efficient and final causation is overcome—this time on what we might call the moral plane. Whatever *is*, expresses the nature and purpose of the Absolute. Therefore the mechanical order of the world-process manifests the absolute purpose. In knowing itself and constituting itself as a process whose events are interconnected by efficient causation, the Absolute is at the same time realizing its end and attaining its perfection, since self-knowledge is its goal. But if self-knowledge is its goal, the truth about itself or, in other words, *absolute* truth is its good, and therefore is the *absolute* good. Hence, mechanism is not morally opposed to purpose, as something destructive to it, which blocks the attainment of the ideal. On the contrary, it is expressive of purpose, and is itself an ideal as well as a real order. The moral and the natural, the teleological and the mechanical, are no more contradictory ethically than they are metaphysically. In ultimate value, as in ultimate fact, they are identical.

XIII. THE NATURE OF THE ABSOLUTE

Identity of the Absolute and the World-Process. The *concept* we are seeking, which unites the two kinds of causation, is *becoming* raised now to a higher level, and indeed made the supreme Reality, the Absolute Idea. Only conceive the Idea as a *process* and all difficulties disappear. In a *process* we have something of which it can be equally said that the parts cause the whole and the whole causes the parts.

In a *process* you cannot vary the sequence and nature of its causes and effects without altering the nature of the process itself. A *process*, therefore, like an alphabet of a personal career, is something that both

determines and is determined by its constituents. Furthermore, a *process* sets its own goal, which lies just in progressing and processing; by progressing and processing, it attains its end. In a *process*, then, end and means, cause and effect are one and the same thing. It is present in its entirety and fulfilled completely in each moment of the temporal sequence in which it manifests itself. And this complete self-realization, and this complete presence of its attained ideal in each of its parts, and episodes, and moments, makes each and all of its instants eternity in its sight.

In the concept of *process*, furthermore, all other contradictions are "taken up" and overcome. The opposition between *essence* and *existence*, and *form* and *matter*, and the *categories* and the *content* of thought is abolished, and the *actual* and the *possible* are united.

The World-Process Its Own Cause and Its Own Goal. Applying now the concept of *process* to the Absolute Idea, what do we find? The Absolute is more than *substance*. It is a *subject* developing and objectifying itself. It is more than *essence*. It is *essence* that also *exists* in and for itself, and completely expresses itself in existing. It is *universal*, but not universal in the sense of being a *general average*. The *Idea* is an Ideal, at once aimed at and realized. Within it other universals, like laws and types, appear as the first self-differentiations of the absolute universal. They are no less necessary to its wholeness than the many are necessary to the concept of unity. The limit of this self-differentiation and self-expression is the *individual*, in which particular existence is united with universality, or to put it Scholastically, in which *thisness* and *whatness* are combined. Furthermore, *what* the universe is accounts completely and exhaustively for the fact *that* it is. Every *possibility* of existence is exhausted and realized in *actual* existence. Outside of the all-inclusiveness of the existence realized in and by the Absolute there are no other possible worlds that might have been realized. In the fact or *thatness* of existence is comprised all the *whatness* of existence, all that existence conceivably *can* be.

Hegel ends the *Logic* with a reiteration of the warning that the world-process which constitutes the Absolute Life and Experience and which enacts the Absolute Idea, is *not* aimed at a goal *external* to itself. It is not seeking to be other than it is, either in its parts, its moments, or its totality. Its end is within itself, and is completely realized from and to all eternity by its being, at each moment and in each episode of its history, precisely what it is at that moment and in that episode. There is no divine, far-off event towards which the whole creation moves. There is, to be sure, a divine event, but it is found in the move-

ment itself, not in some distant climax and termination. It is not far-off. It is taking place in our midst. It has always been present, and in no future, however remote, will it be more present than it is here and now. In short, the Absolute drives on, not for the purpose of getting to some destination. It moves simply for the sake of moving, and its end is attained in the complete self-satisfaction and self-realization it finds in change and motion.

XIV. COSMOLOGY

Nature the External Expression of the Idea. We have reviewed the logic by which Absolute thought and existence are governed. We have seen that its fundamental principle is one of *thesis*, *antithesis*, and *synthesis*, which involves a constant taking up and reconciliation of pairs of contradictory concepts and experiences in higher, more comprehensive and penetrating ideas, until finally all oppositions are overcome in the all-inclusive, all-reconciling, and all-explaining Absolute Idea. It now remains to see more fully how this principle is manifested in the operations of physical nature, of human history, of the state, of art, of religion, and of philosophy.

Nature, Hegel tells us, is coeval with the Idea. From and to all eternity the Idea has been enacted in the world-process, and nature, being that enactment, has no temporal beginning or end. She is the external expression—the *outwardness* and *otherness*, as Hegel terms it—of the Idea, and is therefore *spatial*, *temporal*, and *material*. Space, time, and matter, however, without specific content are as empty concepts as that of not-being, and, as in the case of not-being and being, are synthesized in the concept of *becoming*, which, on the physical level, individuates nature into a system of changing, moving, diffused individual bodies.

The Physical Level. The primary qualities of nature are quantitative—mass, velocity, gravitation, etc.—and are subject to mechanical law. Gravitation is a physical exhibition of *thesis* and *antithesis*, and the stable system that results, of *synthesis* and of *reciprocity*.

Physical objects, however, exhibit not only change of *external relations*, but also of *internal state*, as in light, sound, polarity, magnetism, chemical reaction and the like. This level is much richer in triads of *thesis*, *antithesis*, and *synthesis* and in examples of *reciprocity*, than the mechanical. In chemical processes, in which the inorganic level culminates, elements become fused into new wholes, and matter *becomes* more completely, by changing quality as well as place.

The Organic Level. Coming now to the organic level, we find bodies that are not merely *objects*, but *subjects* as well. Here the synthesis of the parts forms a *whole* that exists in and for itself and influences and directs its constituent elements. Organisms are true *individuals*, which preserve their identity throughout all their changes in such wise that at the end of their careers they are still *essentially* what they were at the beginning. In them the Idea expresses itself, not only as a moving and changing, but as a *living*, matter.

In *vegetable* life, the differentiation and reciprocity between the parts and the whole are only imperfectly developed. In the ascending series of *animal* organisms, they become more and more marked, till they reach their culmination in the human body, in which the *organic* possibilities of nature are completely actualized and exhausted. Here, at last, the Spirit has evolved a physical organ that permits it to become a self-conscious soul.

XV. ETHICS AND POLITICS

Nature of Morality. We now turn to a consideration of *objective Spirit* as manifested in human society and history. Social organization is an indispensable condition of the self-consciousness, self-expression, and self-determination of the Spirit, and therefore of its *freedom*. The objective counterpart of the exercise of freedom by any one individual is a recognition on his part of the *right* of other individuals, also, to be free and self-directing. Society, therefore, implies a reciprocal enjoyment of individual *rights* by its members, restrained and socialized by *duties* they owe one another. This interweaving of rights and duties with the free self-determination of the individual makes him a *person* whose freedom is expressed in a categorical imperative, demanding that he treat all persons, including himself, in the same way. Since personality is lodged in distinct individual selves, it implies a right to privacy and to private property.

The rights and obligations of persons towards one another, the limits imposed upon the expansion of their private personalities, and their reciprocal duties, are expressed in *contracts* by which individuals publicly *bind* themselves to perform certain actions and to refrain from others. Institutions like the family and the state rest upon covenants of this sort.

So far, however, these contracts appear as things imposed upon the individual from the outside. They seem to be restraints upon his freedom rather than expressions of it. In short, we have an apparent con-

flit between the *subjective will* of the individual and the common *objective will* of society, which needs to be overcome. The needed *synthesis* is supplied by the *moral will*, which identifies the private and the public interest and *welcomes* the restrictions laid upon it by the presence of the wills of others and by social organization. For it is only when we voluntarily accept and *will* the public good as our own good that our attitude and conduct can be said to be actuated by *ethical* considerations alone.¹⁴

Individual Freedom and Social Compulsion. Morality, as opposed to mere obedience to law, is pre-eminently a matter of intention and purpose, and moral guilt and innocence are determined on subjective grounds. But to decide what good and bad intentions are, we must first define what we mean by good. What is the human good, the attainment of which a good intention must set before itself? The answer is *happiness*, which, in its turn, may be defined as richness and abundance of life, which, on further analysis, turns out to be life lived in accordance with duty. For, only when we are doing our duty, are we truly self-determined and free in our life.¹⁵

We are now faced with a number of new difficulties. Duty and inclination do not coincide, and the attempt to identify the one with the other leads to a one-sided morality either of undue repression or undue license. Moreover, we cannot take conscience as our guide, since to do so would make it superior to the moral law, make morality purely subjective, and make the individual the final judge of right and wrong. How, then, are we to reconcile objective standards of morality with freedom of individual conscience? ¹⁶

Man a Social Being. The synthesis and reconciliation of the objective and the subjective good Hegel finds in the morals of daily *living*. Individuals are born into a social and moral order, which is not in conflict with their individuality. In it, rather, their individuality is expressed. This order is not artificial. The individual is *naturally* social, *naturally* moral, *naturally* a family man, *naturally* a citizen. The restrictions the moral and social order lays upon him are not interferences with his nature. They are ways in which he freely determines himself as a human being. In the moral order, we have another example of an organic, living whole, which both determines and is determined by its parts, and whose parts reciprocally determine one another.

In the family, this organic, reciprocal unity is seen in the relations

¹⁴ *Encyclopaedia, Philosophy of Spirit (Mind)*, §§ 474-475.

¹⁵ *Philosophy of Right*, Part II.

¹⁶ *Phenomenology*, BB, VI, C. •

of husband and wife and of parents to children. It appears again in the interdependence of the economic activities that minister to human material needs, and in the reciprocal support social institutions afford one another. It is seen in the industrial unions or corporations in which the workers combine in order to ensure themselves secure and decent living conditions and to build up the same sense of kinship and the same spirit of mutual aid as is found in the family. Finally, the organic character of the moral and social order is most completely manifested in the state.¹⁷

The State. The state is the whole that absorbs and synthesizes all other human institutions.¹⁸ It is the expression on the social plane of the Idea, just as the natural order manifests the Idea on the physical level. Its function of ensuring the cohesion, the solidarity, and the reciprocal support, of the individuals that compose it is exercised in three ways, legislative, executive, and judicial. These activities are best and most efficiently carried on by a single individual, in whom sovereignty is lodged. To talk of the sovereignty of the people is to delude one's self. The people does not possess sufficient inner cohesion to possess a coherent popular will. The so-called "will of the people" is a myth. For that reason republican forms of government are unsatisfactory and inferior to monarchy.

But the monarch must not be a despot. He must perform his functions in the interest of the state as a whole, and to that end he must permit and encourage the utmost possible freedom in his subjects. He must foster liberty of thought and speech, that there may be a public opinion on all matters whose true meaning and worth he may understand and appreciate, after winnowing from it the chaff of folly, and ignorance, and prejudice. To this end there must be complete freedom of the press, and, generally speaking, every individual should be at liberty not only to speak but to write as he wills on matters of general interest. Such freedom must, however, not be abused, and some restrictions must be laid upon it. But the vilification to which the great are always subject is something that they must endure as a price of their greatness.

International Relations. International law, in Hegel's opinion, cannot have the same authority over nations as the laws of a country have over its citizens. The state is the ultimate unit of social organization, and there can be no superstate entitled and empowered to enforce

¹⁷ *Philosophy of Spirit (Mind)*, § 512; *Philosophy of Right*, Part III, §§ 142-256. Cf. *Phenomenology*, BB, VI, A.

¹⁸ For Hegel: on the state, cf. *Philosophy of Right*, III, §§ 257-340.

contracts between nations. Nor is there any political force that can moderate strife between nations, as the state keeps the peace between individuals. International quarrels can only be decided by war. The only verdict as to which side is right in a war is the verdict of history.

XVI. PHILOSOPHY OF HISTORY

The Nature of History. We are thus led to Hegel's philosophy of history. History is the expression of the search of the finite spirit for freedom. The great men of history are the Spirit's vehicles. They are the agents by which progress is carried on, and the yardsticks by which progress is measured. Progress, however, is an empty concept without the content and matter given it by society and the state. It consists in successive transformations of the state in the direction of the expression of the Idea in terms of human, social activity and organization.

We may measure history by standards of both geographical and political advance. Geographically, civilization has spread westwards and, as it has pursued the setting sun, it has developed politically. Both advances have manifested three stages, the intermediate one of which may, however, be divided into two periods.

Three Stages of History. Human history begins in Asia. In Asiatic political institutions there is no individual freedom. The individual is completely subjected to the will of the ruler. He cannot even call his soul his own. Obedience is the law of his being, and where obedience to one central and completely dominant individual is lacking, all is chaos and turbulence. In Asia, then, we have the geographical cradle and the political infancy of the race.

The second, double epoch is staged in Greece and Rome and represents racial adolescence and maturity. The political institutions of Greece, which are aristocratic and democratic, manifest the growth of individualism and the conquest, in some measure by some people, of individual freedom, which, however, is not yet a common possession. The sterner, Roman maturity makes the idea of the nation supreme and subjects the individual will to the common needs of national security and growth. Now, too, a philosophical recognition of the *person* and of the rights and duties of the person arises. The individual, completely suppressed by the universal in Asia, and partially emergent from it in Greece, is reabsorbed into the universal on a higher plane.

This process is repeated in the last stage of the political manifestation

of the Idea, which takes place in Western Europe. The individual, revolting against the objective and external pressure of the universal upon him, seeks escape in developing a private, subjective world of his own, in which he may move freely. Finally, the struggle between the outer and the inner and between the universal and the particular is overcome and harmonized in the constitution of a society in which the individual freely wills the universal good, and freely identifies his will with that of the supreme individual, the monarch, in whom sovereignty is lodged and by whom the common will is exercised.

This is the ripe old age of the world. It is a period not of weakness, but of strength. It represents on the objective, political level the return of the Idea into itself, enriched by the harmonious reconciliation of the political principles of absolutism and individualism, of despotism and democracy, and of national cohesion and private freedom. The synthesis begins with the history of Christian Europe, and is completed in Germanic culture.

The Infantilism of the Oriental Stage. So much Hegel tells us in the introduction to his *Philosophy of History*.¹⁹ The rest is largely illustration of these points and expatiation upon them. Take the Orient. The infantilism of China is expressed in the patriarchal form of its government. It is also clearly manifest in the Chinese language, which sounds like baby-talk and is written with pictorial characters instead of an alphabet. India is not quite so childish. Its political institutions have advanced from the patriarchal to the caste system, in which all subjects no longer grovel equally before a single emperor, but have begun to develop distinctions of rank among themselves. The many are no longer blotted out by the one, but have begun to assert themselves.

The Hindoo temperament is still sunk in childish dreaming and make-believe. It lacks vigor and self-reliance. Hindoo ideas are mystical, fantastic, extravagant. Hindoo mentality is pre-adolescent. Hindoo physique is boyish. The beauty of the Hindoo women is languorous, fragile and unearthly. All in all, "the character of Spirit in a state of Dream" is "the generic principle of the Hindoo nature."²⁰

Persia, Assyria, and Egypt have civilizations less removed from complete expression of the Idea. The individual now separates himself from the universal, but still considers himself dependent upon it. Politically the restrictions of caste are lifted. Assyria and Babylonia

¹⁹ Cf., also, *Philosophy of Right*, III, §§ 341-360.

²⁰ The discussion that follows is based upon *Philosophy of History* (trans. J. Sibree. George Bell & Sons, London, 1905).

exemplify advance in worldly magnificence and luxury. Egypt is striving for self-comprehension, and in that striving we may see Spirit seeking to reflect upon itself.

Graeco-Roman Youth and Maturity. History is now ready to enter upon its second great phase, exemplified in the two epochs of Greece and Rome. In the Greeks man first becomes conscious of his individuality, and reflects upon it. All Greek political and social institutions manifest this individualism. Typical, too, of the accent on individuality is the Greek love of form, finish, and balance. Again, if in Egypt we saw the emergence of the individual from nature, so in Greece we may see the return of the individual to nature on a higher plane, where man and nature are not in conflict but in harmony, and where nature appears as an appropriate stage setting for the realization of man's finite, distinctively human ideals.

Still, just because of its contentment with the finite and the human, Greek morality, in spite of its beauty, cannot be regarded as the culmination of the self-consciousness of the Spirit. It lacks infinite aspirations. It is not sufficiently introspective. It is too simple, too *youthful*, and too naturalistic. It has not developed an inner moral sense and made right and morality an affair of the private conscience.

So it is that the youth of Greece gives way to the maturity of Rome, where the individual is once more subjected to the universal, which now appears on a higher plane as an abstract freedom, expressed in constitutional government, dominating the particular man, and, at the same time, constituting him a *person* possessed of *rights*. Out of this new concept of the person and of personal rights, arises the whole edifice of Roman law.

In the Roman Empire, monarchy also returns, having completed one spiral of its upward course. The Emperor has been raised from the status of an Oriental despot to that of a repository of all the functions of the state. The caste system is abolished in the absolute equality before him of all citizens alike. Still, the Emperor's will is absolute, and government consists in harmonizing the will of all individuals with that of the sovereign individual.

The Spiral of Historical Development. Philosophically speaking, the many, who have asserted their independence in Greek life, are subjected again by Rome to the one, but on a higher level than that of Eastern despotism. They have become individuals and persons—which they were not at the Oriental stage of human development. And the one, whose slaves they now once more become, is, so to speak, one of themselves, and, like themselves, an individual and a person. In the

person of the Roman Emperor the Spirit has gained as completely unlimited subjective self-realization as can be gained under objective, political conditions. But in so doing it has contradicted itself, and has really destroyed individuality. For, it is the nature of the individual to be not only one among other individuals, but to be one *on an equality* with others. It is his nature to be limited by them in will and power, rather than to be an absolute master of them, with no restriction upon the exercise of his volition and his strength.

If the monarch is really to rule, and not merely to domineer, the many must reassert themselves. The relations of the sovereign to the subject must be moralized and placed upon a basis of justice and equity. The monarch and his people alike must be participants in a constitutional government guaranteeing individual independence and at the same time binding all individuals together in the service of the nation as a whole. To the development of this final phase of objective Spirit, we now pass.

Early Christianity the Beginning of the Third Stage. It begins with the rise of Christianity. Once more the finite individual, now elevated to the rank of a particular person, begins to assert himself. But this time he does not reappear in opposition to the universal and the infinite, but rather as himself a *particular manifestation* of the infinite, the universal, and the self-existent, which he now recognizes as constituting his inmost essence. Spirit is now about to return to itself in a *synthesis* of its indeterminate manifestation in the Oriental epoch and its finite, determinate manifestation in the Graeco-Roman world. The approaching synthesis is signalized by the Incarnation in which the universal and the particular, the divine and the human, are fused in a single historic individual, the God-man.

The new era, however, dawns slowly. Apart from the historic Incarnation, God and Heaven are still regarded as external to human life. The authority of the two great medieval institutions, the Catholic Church and the State, is exerted upon the individual from without. Politically, the caste system returns, though in a higher, feudal form. Charlemagne, the first Holy Roman Emperor, is still the source rather than the vehicle of justice and might and government organization. His empire rests upon force and subjects other nations unwillingly, and by outer constraint, to its rule.

At last, however, the individual reappears, and the many proceed from the one—by three steps. Geographically and politically the empire of Charlemagne falls to pieces and the nations of modern Europe begin to form themselves upon its ruins. Men start rebelling against the

feudal system and against their liege-lords, who govern by an outward force in which there is no intrinsic right. Little by little, sovereignty is built up about a supreme authority, who is a truly *political* power. In the sight of the sovereign his subjects are not only all equal, as they were in the sight of the Roman Emperor; they are all possessed of *equal rights*. And their wills are interwoven into a common interest. The *one* has now become a *whole* in reciprocal relations with all its parts. The transition to modern monarchy is taking place.

Meantime, to complete the triad of reactions against medievalism, the Church rebels against the world and the conditions of the time. She reaffirms the supremacy of the inner, spiritual life, and re-emphasizes the worth of the individual soul in the eyes of God.

The Culmination in the Reformation. The stage is now set for the final act in the development of objective Spirit. In Germanic culture the Spirit at last becomes fully conscious of its freedom and freely wills the identification of the individual with the true, the eternal, and the universal. The act is divided into three scenes. First there is the Reformation, which is the true sunrise whose approach was heralded at the end of the Middle Ages by the false dawn of the Renaissance. Then we have the period immediately following the Reformation, and finally the German Enlightenment.

The Reformation proclaims the freedom of man—his freedom to worship God as he chooses, and to make his peace with God directly without external ecclesiastical and political control, and his freedom to develop his social and political institutions without external direction. It fuses Church and State in the same moral and social order, and subjects them both to identical standards and laws. The Catholic distinction between the priesthood and the laity disappears, and all priests are men like others, and all men, men of God.

In the same way the contradiction between the position of the monarch and that of the subject is overcome. Petty principalities are merged into larger wholes. Fractious and semi-independent vassals are brought to heel. The power of the monarch is consolidated, and its exercise is "invested with an authority emanating from the State."

The French Enlightenment and the German "Aufklärung." The second phase is the phase of the Enlightenment, the French Revolution, and the Age of Reason. Man now *reflects* upon the situation, and seeks rational grounds for his increasing freedom. He unites himself once more with nature, as the Greeks did, only on a higher plane. He regards the laws of nature as *reasonable* and *good*. He draws from them the concept of the *right* of man. In him Spirit is now recogniz-

ing its freedom and worth as an individual, but, for the moment, still as a particular opposed to the universal.

But not for long. Spirit is about to return to the universal and to unite the individual with it in the highest and final form of freedom—the rational freedom of the individual, expressed in disinterested public spirit and action, subject to the freely willed and accepted limitations of society and the state. In such circumstances the will is no longer actuated by impulse, be it selfish or benevolent, but simply by its own nature, or, in other words, by duty. But duty is no longer opposed to inclination. This self-legislation of the will, “will making itself its own object,” is “the basis of all Right and Obligation—consequently of all statutory determinations of Right, categorical imperatives, and enjoined obligations.”

Thus self-directed and fully free, the individual will subjects itself and its rights to the objective freedom found in a social organization based upon reason and morality. But the service of such an organization is the service of reason and right, and therefore of the individual will's own inmost nature. There is no longer any conflict between the subjective and the objective, the particular and the universal, the individual and society. On the contrary, they are reconciled and synthesized in a concept of freedom that identifies them. The attainment of this freedom is the work of the German *Aufklärung*.

XVII. PHILOSOPHY OF ART

The Nature of Beauty. The historical development of objective Spirit has now run its course and culminated in the political institutions of Germany. We rise now to the highest level of the expression of the Idea—the realm of *Absolute Spirit*, which manifests itself in art and religion and philosophy:

Before discussing the history of art, we must pause a moment to describe the nature of *beauty*.²¹ Wheresoever the Idea is sensuously displayed we find the *beautiful*. Since the Spirit discovers much in nature that pleases it and that it regards as a congenial mise-en-scène for the exercise of freedom, it perceives *natural beauty* in the universe. But there is also much in nature in the way of unresolved contradictions that is either out-and-out disagreeable to the esthetic sense or that suggests possibilities of being made more pleasing. Where this is the case, the Spirit seeks through *art* so to reconstruct the material provided by nature that it conforms to the esthetic demand and becomes

²¹ The discussion follows Hegel's *Aesthetics*.

beautiful. In so doing the Spirit, working through the artist, gives a more complete sensuous embodiment of the Idea than that afforded by nature, and brings *ideal beauty* into being.

Oriental Art and Its Symbolism. Coming now to the evolution of art, we find that it goes through the three phases of thesis, antithesis, and synthesis, and in so doing runs parallel to the unfolding of human history. Oriental art is *symbolic*, and is largely *unconscious* of the Idea it is striving to portray. In its most primitive phases the symbol and that which it symbolizes are not distinguished, but are confused and identified.

A step above this is *fantastic* symbolism in which the sensuous content and its spiritual meaning, though separated in name, still remain imaginatively confused, and confused in such a way that the symbol counts as a reality. Of this, Hindoo art is an example.

The Sublime. Finally, in Egypt we have a real symbolism, in which the symbol suggests that it means more than it is, but leaves the nature of this "something more" a *mystery*. It is with the sense of mystery that the sense of the *sublime* is associated. The sublime is that which defeats every effort of sense and imagination to picture it. It is that whose presence reduces all else to nothingness. It can be described only in symbolic terms. Even so, it defies every effort of the pictorial arts to symbolize it, and can be given only by poetry anything approaching adequate symbolic expression.

The Absolute, since it defies sense and imagination, is sublime. Religion symbolizes its sublimity in two ways, pantheistic and personalistic, according as we regard God as the universe itself, or as an individual transcending the universe. Based upon this dual symbolism of the Absolute, we have a double flight of the artistic imagination, particularly in poetry. On the one hand, we have mystical religion and art that are pantheistic in spirit, on the other, religion and art that deal with God as a person.

As soon as art and religion clearly recognize the inadequacy of the symbol to that which is symbolized, we get *conscious* symbolism, which either *illustrates* by myths, parables and the like, or uses *metaphor* as in allegory, simile, and symbolic painting.

The Human Character of Classical Art. The second great period of art, the classic, begins in a rude and primitive manner, with idealizations and personifications of natural phenomena in which moral character is attributed to natural forces, and the world-process is interpreted in terms of human interests and activities. Little by little the humanization of the universe is carried on by Greek religion and art, till we

reach a culmination, in which the natural and the moral are brought into complete harmony, and the ideal world appears as a community of man-like gods and god-like men united by a common civilization. The gods, however, although they are represented as idealized human beings, are not without sublimity. They dwell apart from man on serene heights that raise them far above the clouds and storms of the human level of existence. They are carefree and deathless.

Under these conditions art takes the finite as subject matter and gives it a finite form. In dealing both with the human and the divine its aim is to depict the definite, the finished, the balanced and the harmonious, freed for the moment from the brooding shadow of the infinite. Its accent is upon the individual, not the universal.

Such art bears within itself only too obviously the seeds of its decay. It is one-sided. It is too preoccupied with the finite. It has created only statues, not flesh and blood men. In invading religion, and in making religion a cult of beauty, art has deprived the gods of any real objective existence and has transformed them into subjective ideals.

The Synthesis Effected by Romantic Art. So it is that classic art makes way for the third and final phase of artistic expression—the modern, romantic movement. Art now turns inward for its inspiration, and finds its material in the character and meaning of the inner life. It creates music and lyric poetry as new vehicles of its expression, and religious art is preoccupied not so much with the outward story of Christ as it is with the spiritual meaning of the episodes of his life. Again, on the secular plane, it finds its subject matter in adventure, in chivalry, in knighthood, in loyalty and honor, and in romantic love. The infinite and the universal return, but no longer opposed to the individual and the finite. On the contrary, they now complete and perfect it. In modern romantic art the *synthesis* of the Oriental and the Classic, the infinite and the finite, is at last accomplished.

Each period has its typical and dominant art. The typical art of the Orient is *architecture*, of the Graeco-Roman classicism, *sculpture*, of the modern romanticism, a trinity of *poetry*, *painting*, and *music*.

If we now examine the separate arts, we shall see them one and all exemplifying the *thesis*, *antithesis* and *synthesis* of the three periods. Oriental architecture, sculpture, painting and poetry are fantastic, symbolic, mysterious and inarticulate. Classic architecture, sculpture and literature are poised, serene, finite, finished. Then comes the Christian, romantic Gothic, soaring, aspiring, pointing beyond itself, suggestive of meditation and the inner life, yet wholly articulate and free from the monstrosity of Oriental architecture. So, too, Gothic and

Renaissance sculpture and painting, though finite and finished in outer semblance, express an inner life and experience. They depict not the body but the spirit within it. And lyric poetry, perfect in form, interprets the aspirations of the soul. In each separate art, as in art as a whole, the final, Romantic period reconciles the contradiction between the Classic and the Oriental.

Art, however, even in its final romantic phase, fails to effect a synthesis of *subjective* and *objective* in *absolute* Spirit. In its exemplification of the free creation of the object by the subject, it affirms only the Absolute Spirit's *subjective* activity. In this respect it is the *antithesis* of religion, which reaffirms the *objective* phase of Absolute Spirit by its insistence that the creative individual is himself created and depends upon a being external and objective to himself. To religion we now turn.

XVIII. PHILOSOPHY OF RELIGION

Since religion stands to art in the relation of thesis to antithesis, we naturally cannot look to it for an ultimate synthesis of the subjective and objective phases of Absolute Spirit.²² The development of religion, however, like that of art, is a process of increasing reconciliation of the subjective and the objective within its own sphere. This process reproduces the stages, already noted, of the evolution of history and of art.

We begin with *natural religion*, in which man feels wholly dependent upon and subservient to nature. He is her creature and her plaything. He lies prostrate before inhuman, semi-monstrous, infinite forces over which he has no control. Such is the religious attitude of the Orient—an attitude expressed in three ways, in Chinese religion, in Hindoo religion, and in Buddhism.

As we travel west, however, we find this relation of utter subjection yielding to a dawning self-assertion of the individual and attainment of freedom. Man is no longer deifying external, natural forces only. He is beginning to find gods within his private, moral experience. Here, too, we have three manifestations of the new spirit. Persian religion opposes moral good to moral evil. Its gods represent not only natural but moral forces. The religion of Syria dwells upon the dying and the rising god, and finds a religious significance in suffering and death. The Egyptian religion is full of mystery. Its gods are symbols of unknown spiritual forces operating behind the veil of nature and of sense.

²² The discussion follows Hegel's *Philosophy of Religion*.

Asia Minor and Egypt thus prove a spiritual as well as a geographical stepping-stone to Rome and Greece and Palestine. For the Hebrew, Greek and Roman cults form a trinity in the unity of the new worship of spiritual individuality and inner freedom, which now appears as the antithesis to the Oriental prostration before objective nature.

Judaism accents the transcendental individuality and personality of God, and invests him with sublimity. It also stresses his righteousness and justice and mercy and other *moral* qualities. Hellenism, the cult of humanity and beauty, asserts against the transcendentalism of the Hebrew Jehovah, the kinship of the gods with men. Man is on a familiar and friendly footing with them, and enters into every relation with them that he would with other human beings. In Rome, we have a religious expression of the notion of order. The gods are gods of the state. Their primary relations are with institutions rather than with individuals. They are, one might say, members of the state. Their worship is a political affair, and is dominated by the political order and by political considerations.

We are now prepared for the final phase of an absolute, all-reconciling religion, in which the antithesis between the universal and the individual is overcome. This is provided by Christianity, whose fundamental concepts effect the necessary synthesis. The doctrine of the Trinity especially is found by Hegel to be profoundly significant. The Father represents the pure identity of the Absolute. He is the Absolute Idea reflecting upon its essential unity. The generation of the Son by the Father is the final religious expression of the appearance of difference within identity. It is the Absolute Idea developing itself in the manifold variety and contradiction of the world-process and in the conflict and suffering that multiplicity and contradiction entail. In the Passion and Resurrection the suffering and conflict are conquered, sanctified, and glorified, and exhibited as essential to the richness of the Absolute Idea.

The Holy Ghost, proceeding from both the Father and the Son, is the manifestation under the form of religion of the return of difference into identity, and of the gathering up again of all the variety and multiplicity and contradiction of the world-process into the unity of Absolute Spirit. Thanks to its outpouring, the finite, individual spirit, enlightened by Christian teaching, is able to believe that the universe is good and the work of God, despite the seeming evil and discord of which it is so full.

Christianity, however, in spite of its synthesis of the objective and

the subjective aspects of *religion*, does not completely reconcile the objective and the subjective aspects of Absolute Spirit. For all religion involves imagination, faith, and mystery; whereas a final synthesis of the subjective and the objective can only be attained by *understanding* and *rationally demonstrating* their unity and identity. This is the work of *philosophy*.

XIX. THE HISTORY OF PHILOSOPHY

In philosophical speculation, what was formerly a matter of imagination and faith now becomes the work of *reason*. We can *demonstrate* the reciprocal relation, one pole of which is emphasized by art, the other by religion. The Spirit, rising to its absolute level, realizes that all existence whatsoever, be it nature, or society, or the individual, is the creation of reason, and that the will of the individual, in so far as it is moral and rational, is one with the universal will and is fulfilled in the same common good. When by the aid of philosophy we *know* what on the lower levels of Absolute Spirit we have imagined or believed—that Reality is Reason and that all its manifestations are completely intelligible—then we also *know* that, in submitting our minds to the laws of logical and exact thinking and our wills to the moral law, we are attaining and exercising in common one and the same absolute freedom of self-expression. In that supreme, philosophical act of absolute knowledge and absolute will, all our differences are reconciled and *aufgehoben*, and subject and object, the many and the one, the particular and the universal, are synthesized, freed from all contradictions, in the living truth which is the Absolute Idea.²³

The final synthesis, like the partial reconciliations effected by art and religion, is built up progressively. Philosophy, too, has a history,²⁴ and that history, also, exhibits thesis, antithesis and synthesis. Oriental metaphysics, we are told, true to the Oriental spirit, denies the being and worth of the individual and reduces the many and “becoming” to illusion. The general temper of Graeco-Roman philosophy is to revive the many, to affirm the existence of the particular, and to exalt the importance and value of the individual and of his subjective experience.

The distinctively Greek period has its three moments. Pre-Socratic philosophy concerns itself with nature, and with the problems of matter and form, motion and rest, the whole and its parts, and the like,

²³ *Phenomenology*, DD, VIII.

²⁴ *History of Philosophy*, Oriental Philosophy, A, B.

raised by an investigation of nature. Objective Spirit is rescued from the nothingness to which Orientalism condemns it, and at the same time the individual as a part of nature recovers his existence. The Sophists and Socrates place the emphasis upon the subject, and base the moral order on the individual. Plato and Aristotle seek in their systems to synthesize nature and the individual, the universal and the particular.

The Roman period, whose subjection of the individual to the state drives him back upon himself into his inner life for the exercise of freedom, is marked by Stoicism, Epicureanism, Skepticism, and Neo-Platonism. These philosophies find the moral good in an inner peace of mind, which the world can neither give nor take away, and in an inner approach to and contact with the Real. In this way, Rome, though destructive of Greek individualism, becomes the foster-mother of inner self-determination and of personal, private liberty of thought and attitude.

In medieval philosophy, dominated by Christianity, we begin the long and tortuous approach to the final period of modern thought. Christian dogma is given metaphysical backing, the new philosophy is systematized, Plato and Aristotle are invoked to support it and are interpreted in accordance with its needs, and the conflict between the particular and the universal breaks out again.

Then comes the Renaissance. Nature and the individual reassert themselves, aided by the discovery of the true Plato and the true Aristotle freed from the glosses given them by the Church. Human life and human individuality, regarded as parts of nature, are once more exalted as they were in Greece. Nature herself becomes deified in pantheistic systems. The individual recovers to some extent his objective liberty, and begins a free investigation of the external world, with which, however, the Church still tries to interfere.

Upon the Renaissance follows the Reformation, and with it modern philosophy appears. Its harbingers are Bacon and Boehme; Bacon because he establishes the scientific method and insists on its universal application, Boehme because he so clearly perceives the principle of contradiction and of the identity of opposites. Next, Descartes and Spinoza try, by applying the scientific method, to *understand* the world—an attempt which ends disastrously in setting matter and mind, the objective and the subjective, in irreconcilable opposition to each other. This provokes a period of skepticism, exemplified by Locke and Hume, in which the objective is largely reduced to terms of the subjective. Also we have attempts by Leibnitz and Wolff to heal the

breach between the two principles. In France a naturalism reappears in which mind is reduced to terms of matter. Morally, there is a tearing down of established standards and beliefs. Freedom of individual thought and action is affirmed by Rousseau, subject, however, to the control of reason, and identified with rational thinking and conduct.

The stage is now set for German Idealism, initiated by Kant, continued by Fichte and Schelling, and brought to its climax in the Hegelian system by which all previous philosophy is *aufgehoben* and synthesized. The Absolute Idea is once and for all made manifest on the highest plane of its self-expression. Pure reason by pure reasoning has wholly laid bare its own essence, and, since thought and existence are identical, has in so doing revealed the essence of the Real.

Chapter XVIII

SCHOPENHAUER

I. LIFE

Early Education. The finality of Hegel's philosophy did not remain long without challenge. The gauntlet was at once thrown down by Schopenhauer. Arthur Schopenhauer was born in 1788 into one of the rich merchant families that constituted the aristocracy of the free city of Danzig. His people were well off, and his parents were cultured, traveled, and broadminded and liberal, religiously and morally. His father, particularly, was sympathetic and indulgent, ever respectful of the son's independence and right to develop his own opinions and carve out his own career.

When he was five years old, his parents, outraged by the annexation of Danzig by Russia, moved to Hamburg. At the age of nine he was placed for two years with a French family at Le Havre, in the belief that a knowledge of French would be valuable to him in the commercial career which it was hoped he would follow. For similar reasons he was left when he was fifteen with an English clergyman at Wimbledon near London, while his father and mother were making a tour of England and Scotland. He picked up English and with it a distaste for what he considered Anglo-Saxon cant and hypocrisy and the interminable round of morning and evening prayers inflicted upon him by the clerical household.

After three months of this he rejoined his parents, and was bribed out of an already developing distaste for his father's business by the promise of a Continental tour. He stopped for some time in Paris, and visited the south of France, Switzerland and Vienna. Finally, obedient to his promise, he returned to Danzig as a business apprentice, and then, returning to Hamburg, got a job in a mercantile house.

Financial Independence. In 1805 his father died. The estate, to be sure, had been somewhat depleted by the depression that followed the boom in Hamburg's prosperity created by the war between Prussia and France. Still, he inherited enough to be financially independent, and his father's death absolved him from his promise to go into busi-

ness and left him free to follow his own inclinations. The family circle, moreover, was broken. His mother, who was a brilliant woman of considerable literary talent, and who found domestic ties in general, and her husband and children in particular, something of a bore, decamped at once to Weimar, where she embarked upon a literary career, made of her house a kind of salon, and proceeded to live her own life. Thither Arthur presently followed her, and was there impressed, if not carried away, by the enthusiasm for things Greek of which Goethe, now an old man, was the center and the chief exponent. His temperament, however, was incurably romantic and the serene influences of the Weimar circle, though they helped form in him a great admiration for Plato, could not make the leopard change his spots.

Idiosyncrasies. By now these spots were definitely marked. He loved philosophy. He hated women—an aversion rooted perhaps in his lack of sympathy with his mother, and fostered by her new and rather free mode of life and by the circle of friends she had gathered about her, most of whom he cordially detested. This aversion to his mother grew on him, so much so that later on he neither saw nor corresponded with her for many years. And his enmity towards her expanded into a contempt and repugnance for the whole sex, expressed in his famous *Essay on Women*, which his sporadic and temporary liaisons (for he never had a serious or lasting love affair) served only to intensify.

Again, the famous pessimism of Schopenhauer was temperamental, though doubtless it was exaggerated by his unhappy filial relations. As a youth he was abnormally sensitive to the spectacle of suffering in all forms and particularly to animal suffering. Its existence, he felt, could not be reconciled with any theory that affirmed a just and benevolent God, and was proof positive that existence is evil.

Philosophical Studies at Göttingen and Berlin. Upon attaining his majority and receiving his share of the paternal fortune, he entered the University of Göttingen. There his interest in philosophy was further stimulated by Schulze, whom we may remember as one of Kant's critics and the author of *Aenesidemus*. Under Schulze's guidance he became a devotee not only of Plato but of Kant. At the same time, he cultivated other things besides philosophy, notably his musical talent and the pleasures of society where he was perhaps not over-popular because of his self-assurance and his overweening ways.

From Göttingen, he migrated to Berlin and devoted himself to the natural sciences and particularly to medicine, psychology, and psychopathology. He attended Fichte's lectures and acquired a contempt

for Fichte's teaching. Presently the retreat of Napoleon from Russia and the declaration of war by Prussia against France endangered Berlin. Schopenhauer departed first to Dresden, and then to Weimar, where he prepared his thesis for the doctorate at Jena. This was his first work, *On the Fourfold Root of the Principle of Sufficient Reason* (1814). Meantime he had had an interesting correspondence with Goethe over Goethe's attack on the Newtonian theory of light, which led to the publication in 1816 of his essay *On Vision and Color*.

The final break with his mother had taken place, and Schopenhauer was now living in Dresden. His system was taking definite shape in his mind. He had been reading the French materialists, Cabanis and Helvétius, and he had also been profoundly stirred by the Latin translations of the Upanishads, which had first appeared in 1801, and by other books on Hindoo religion and philosophy which had been written since that time. In 1818, his book was ready for the press, and at the end of the year was published under the title of *Die Welt als Wille und Vorstellung* (*The World as Will and Idea*). Like Hume's *Treatise*, however, it fell still-born from the press, and a second edition, twenty-six years later, met with little more success.

Life in Italy and Frankfort. Meanwhile, his life flowed along in an easy and uneventful fashion. While his book was still in the publisher's hands, he had left for Italy, where he spent the winter. On his return, he applied for and received an appointment as *privat-docent* at the University of Berlin—a city which he disliked heartily. Here, he and Hegel came immediately to blows. He had another fight, too, on his hands with the family firm at Danzig, which had gone bankrupt—a fight from which he emerged triumphant, with a considerable part of his modest capital still intact.

The Berlin episode was short, and Schopenhauer was off to Italy again. But after two years' absence he returned, not to teach but to work in independence. His bachelor habits were now firmly established. Long since, in Göttingen, he had initiated the series of poodles, which were his closest companions. His mother was wholly out of the picture, and another domestic row had estranged him from his sister. He learned Spanish, and in 1829, we find him trying to arrange with a British firm for a translation of Kant's works into English.

In 1831 came the great cholera epidemic, which carried Hegel off. Schopenhauer fled the city and removed to Frankfort, where he was destined to spend the rest of his life. Here he settled into a regular routine. After his morning tub—one apparently agreeable memory of his sojourn in the clerical family at Wimbledon—and his coffee,

taken not too early, he worked the entire morning. At noon precisely he stopped, diverted himself for a half-hour upon the flute to relax his mind, and betook himself to the *Englischer Hof* for midday dinner. After dinner a nap and light literature till four. At four a rapid, two-hour walk with his white poodle, which all the children in the neighborhood called "young Schopenhauer."

Rise to Fame. After his walk, the "elder" Schopenhauer, at least, visited the reading-room to peruse the papers and reviews. Thence he went on sometimes to the theater or a concert. Supper followed between eight and nine, washed down by half a bottle of wine. An hour's reading, while he smoked his long pipe. And so to bed.

In 1836, Schopenhauer published a short work *On the Will in Nature*. Nothing came of it. He continued to be ignored both by the philosophers and the laity. He had a moment of high spirits when an essay dealing with free-will won a Norwegian prize, but these were immediately dashed when an essay on the foundations of morality was rejected at Copenhagen. Both these essays he published in 1841 as *The Two Fundamental Problems of Ethics*. Meantime his hatred for the successful Fichte, Schelling, and Hegel grew more intense.

Nevertheless, his day was just beginning to dawn. By an irony of fate, though he himself had scant sympathy with materialism and naturalism, the scientific spirit and democratic institutions, his views were invoked by the champions of these rising movements, and he began to find himself the center of an ever-widening circle of disciples. Furthermore, he was also being taken up in England, where his ideas proved a valuable ally to anti-theological and anti-clerical agitation. His British reputation was enhanced by an article in the *Westminster Review* praising his *Parerga and Paralipomena*, a book of essays published in 1851.

People at home and abroad now began to read him. Another edition of *On the Will in Nature* appeared in 1854, a third edition of *The World as Will and Idea* in 1859, and, just before his death, a second edition of *The Two Fundamental Problems of Ethics*. He appealed not only to the materialists and anti-clericals, but to the mystics, the spiritualists, and generally to all the cults and "isms" that still, today, rush to supposed Magi and Hindoo lore for inspiration. Curiously enough, the army, too, felt his fascination, and he numbered many officers among his disciples. And the hated women flocked about him. There were demands for his photograph. His portrait must be painted. Strangers flocked to the *Englischer Hof* to watch him eat. Even the

Universities sat up and began to take notice. Leipzig went so far as to offer a prize for the best essay on his system.

Schopenhauer had been unusually vigorous and healthy all his life. But now age was beginning to tell on him. His heart was not so good as it had been. His walks had to be shortened and taken at a slower pace. But nothing could daunt or restrain him or convince him that he was growing old. In the autumn of 1860 he had a slight heart attack, followed by pneumonia. He convalesced and was up and about again. One morning he had arisen and breakfasted as usual. A few minutes later, his doctor, dropping in to visit him, found him lying back in a corner of the sofa, apparently asleep.

II. CRITICISM OF FICHTE AND HEGEL

Acceptance of the Idealistic Hypothesis. Schopenhauer accepted along with Fichte and Hegel the analogy of a human career in describing the character of the Real. For him, as for them, Reality was an activity of willing and of thinking. He sided, moreover, with Fichte against Hegel in maintaining that the will is prior to the intellect, and that thinking arises incidentally to volition. But here the resemblance ends. Fichte and Hegel regarded the world-process as through and through moral and rational. Its aim was the expression of moral freedom or of intellectual clarity and consistence. The Fichtean Ego never swerved from its lofty moral purpose. The career of the Hegelian Absolute was governed by an unflagging reverence for the laws of the strictest logic, and an impeccable obedience to them.

Schopenhauer, however, was suspicious of the perfect rationality and morality attributed to the Absolute by Fichte and Hegel. In his doctoral thesis, *The Fourfold Root of the Principle of Sufficient Reason*, he had already cast doubts upon the efficacy of reason as an instrument for discovering the nature of Reality, and had insisted upon the importance of immediate, unrationalized experience and of volition. In *The World as Will and Idea* he developed this line of thought and subjected the content of consciousness to a sort of psychoanalysis, with a view to discovering its real character, and to inferring from that character the real nature of the Absolute.

Experience and Reason Expressions of the Will. The first book of *The World as Will and Idea* is devoted to an analysis and appraisal of the representational, perceiving, thinking aspects of experience. He agrees with the idealistic hypothesis that all knowledge is of perception, and with the idealistic division of experience into subjec-

tive and objective, and the distinction between sensations and ideas within objective experience. He accepts the Kantian view that space and time are not abstract ideas but *a priori* forms of the sensible manifold. They are, however, twin expressions of a deeper condition and principle of all sensible experience—the principle of *causation*. No event in the stream of phenomena can be experienced as causeless. It must have a reason why. This reason must be different from it. To be different from it, it must occur in a different *moment*, or occupy a different *place*. Space and time, then, are forms of causality.

Matter, again, is nothing but another form of causality. As the *content* of space and time, it is the expression of causal activity passing in *change* from one time and one place to another. Furthermore, it is a union of space and time, and enables us to correlate a particular spatial position with a particular temporal moment. In every material object “here” and “now” are conjoined.

Reason Secondary and Instrumental. Turning now to abstract ideas, we find that they are quite different from perceptions. They reflect or represent them. They are not caused by one another. They are *inferred* from one another. Nevertheless, chains of inference must always end in a concept founded upon experience. *Understanding* draws concepts from experience and keeps them applied to experience. *Reason* uses concepts without reference to the percepts upon which they rest. By detaching them from their anchorage in sensation it is able to voyage, to explore, to invent, to create, and to predict.

For instance, from any given example of cause and effect the *understanding* infers that the cause has produced the effect in question. But when we wish to *repeat* the observed effect, and when we deliberately repeat the cause in order to produce it, we use our reasons, not our understandings. For we are, in that case, acting in accordance with a concept of causation in general, without which we should be unable to feel that a repetition of the one event would be followed by a recurrence of the other.

Nor should we forget that it is reason that makes truth universal and communicable. On the level of understanding we could not pass on our knowledge to one another. I could not, for example, communicate to you my understanding of how a particular instrument works, unless I could compose my message to you in terms of the general principle of that instrument, applicable to all similar instruments in all experiences in all times and places, and comprehensible by all intellects.

The upshot of the whole matter is that all reason is *practical* and

has to do with experience. It can give us nothing that is not found in experience. It adds nothing to our knowledge of Reality. All truth is directly or indirectly connected with experience. The concepts closest to experience are likely to be the truest, since the further a chain of inferences gets from perception, the greater are the chances of error creeping into it. There is nothing behind or beyond or deeper than sensation. All our so-called getting *behind* or *beneath* sensible experience is really constructing *upon* experience. Hypotheses, scientific and metaphysical, erected by reason, remove us, if anything, from the *felt* essence of the Real.

III. REALITY AS WILL

Knowledge and the Real. Still, Schopenhauer goes on, in the second book of *The World as Will and Idea*, there is more to experience than a kaleidoscope of sensations. Experience *interests* us. It *means* something that is *more* than what shows upon the surface. Our question now becomes, What is this *more*? The philosophers cannot answer this question, for they all disagree. Nor can the mathematicians and the physical scientists give an answer. Mathematics deals only with certain external relations between sensible phenomena. The physical sciences simply describe how experiences arrange themselves in space and time according to the law of causality. But they tell us nothing of the inner nature of the phenomena themselves. Plainly, since we *know* experience entirely *from without*, the "*more*" that we are looking for must be found by getting inside phenomena, and by feeling them from within. Can this be done?

Certainly not by the so-called process of knowledge, Schopenhauer replies. Knowledge deals only with the outer aspects of experience. It does nothing but synthesize and interrelate phenomena.

Will and Reality. We must, therefore, look elsewhere for the clue. Let us examine ourselves. We are phenomena like everything else. We have *bodies*, submitted like all other bodies to space and time and causality. We view ourselves, as we view everything else, from the outside. But, at the same time, I see other bodies and my own body *from within* my own body. In myself, then, I am aware not only of the external characteristics of all phenomena, including myself. I am also aware of the inner nature of a phenomenon. My awareness is neither perceptual nor conceptual. It has a peculiar warmth and intimacy. It is a living, glowing, dynamic experience. It is what we call *Will*.

Again, from the point of view of knowledge and reason all phenomena, including my own body, are on precisely the same footing. My body is no more and no less intelligible than any other body. No special accent of any sort is laid upon it. In short, as a pure intellect engaged only in *thinking* about things, I should have no means of claiming any one particular body as *mine* more than any other. It is my *will* that claims one among the many equal objects of sense and knowledge as *its*. It is my *will* alone that is *within* the body I call *mine*, but outside all other bodies. It is upon the will, not the intellect, that the distinction between the self and the not-self rests. It would seem, then, that so-called *rational* thought is in reality "wishful" and dictated by the nature of the will. Hence *reason* cannot be the essence of the Absolute.

But what is the relation of my *will* to my phenomenal self in which I appear as a spatio-temporal event experiencing and knowing a phenomenal world? The relation cannot be one of causation, since causation has to do only with the spatial and temporal phenomenal aspects of experience. The movements, for example, of my body, though expressive of my particular will, are not caused by it. They are, rather, my own *perceptions* of the way in which I will to act. They are, in Schopenhauer's phrase, objectifications of my volitions. So, too, my whole body, and myself as I exist for myself as phenomenon, may be regarded as my will become conscious of itself and visible to itself, that is, as an *objectification of my will*.

Escape from Solipsism. So far, so good. But can I be sure that anything exists except *my will* and *my experience*? The whole of my experience, including the entire so-called external world, may be, for all I can know or perceive, simply the objectification of *my will*. I may still be the Absolute and *you* may be a part of my cosmic dream. To show that this is not the case, we must show that all other bodies, like my own, are manifestations of a *will* actuating them from within.

To do this we must inspect more closely the nature of the Will. The Will, transcending, as it does, the world of phenomena, is a true thing-in-itself. It is above space, time, and causality, which are forms only of its outer, objectified aspects and not applicable to its inner character. It is one, since all multiplicity and individuation are due to spatial and temporal conditions of existence. Indeed, my own individuality, and selfhood, and existence as a distinct person, are superficial. I am one individual among many simply because I have a particular body, and my possession of a particular body is incidental

to the space-time form in which the will objectifies and appears to itself.

It would be, therefore, absurd to suppose that the Will is more objectified and more intimately connected with the perceived phenomenon I call *my* body than with the perceived phenomena I call external bodies. All bodies are equally manifestations of an inner reality, and each one is as directly grounded in that reality as any other. Hence the Will must be regarded as no less *within* the external world than I feel it to be within myself. It must feel itself and recognize itself *internally* in other bodies besides mine, just as it views itself *externally* in them.

Metaphysical Characteristics of the Will. Since the Will is above space, time, and causality, it is self-caused and self-determining. Hence it wills *freely* to objectify itself in a world-process subjected to these conditions. In me, for example, it wills *freely* to become my body, my life, my career, and to subject its manifestation of itself in me to the same causal necessities as govern other phenomena. The laws of nature are the formal rules which the Will itself determines to follow in its behavior. Hence there is no conflict between the inexorable determination of one event by another and the undetermined nature of the Will itself.

IV. THE NATURE OF THE ABSOLUTE

The Irrational and Amoral Character of the Human Will. Schopenhauer has now set forth his reasons for believing that the Absolute is Will rather than Reason. It now remains to determine the nature of the Will. To do this we must examine the behavior of the Will both in ourselves and in the rest of the phenomenal world in which it objectifies itself.

A frank and fearless analysis, both of subjective individual experience and of the larger absolute experience which constitutes the world-process, shows that their motivations, far from being organized as a moral Will actuated and stabilized by a moral purpose, are disorganized, contradictory, and blind. In ourselves, the Will resolves itself into a welter of irrational, conflicting, and reciprocally stultifying desires, ends, and satisfactions to whose procession there is no end. Each seeming goal attained turns itself into a new dissatisfaction and a new craving. Human life has no goal, nor could it reach one, if it had it. Fundamental in ourselves, and driving us forever on, is a blind and diffuse craving just to exist, under any circumstances, anywhere, at any cost.

The Irrational and Amoral Character of the World-Process. If we now turn from an analysis of ourselves to an examination of the external universe and the world-process, what do we find? We note immediately that external forces and events conflict with one another and destroy one another. This is true of all grades of cosmic development. Inanimate objects smash one another up. Living bodies prey upon one another. Sensitive organisms inflict endless pain upon one another. Intelligent organisms are in a state of cut-throat competition and often of open and bloody battle. The world-process is one of endless suicide. All we can infer from it is a Will whose essence is discontent, and whose aim is simply, as we have already said, to be anything, anyhow, anywhere, at any price.

The Absolute, then, far from being the organized, unified, morally inspired affair that Fichte imagined it to be, is blind, irrational, and unmoral. It is *a will to be, a will to live*, no matter how. Its essence is simply to *affirm* itself, and to appear as a world-process, no matter what. In such a Will there is no purpose, no morality, no happiness, no good. Its motivation is insane, its fruit is suffering, and the universe created by its blind and conflicting cravings is an evil thing.

In its insensate striving, the Will follows a fixed line of development in which we may distinguish successive *grades of objectification*, rising step by step from a lowest level of the blind and inanimate events and forces of mechanical nature to a highest level attained in the conscious life of man. In these successive grades we find the nature of the Will objectively presenting itself with more and more distinctness and completeness, till at last in human beings we get our closest and most correct view of it.

Existence as Conflict, Suffering, and Evil. From our observation of the grades of objectification we also receive a valuable hint of the true relation of the intellect and of knowledge to the Will. In each individual thing the Will *aims* at preserving and maintaining itself as best it can against opposing phenomena. To this end it devises *means*. Such law and order and structure as obtain in the universe are but the strategic plan of the tragic battle of the Will with itself, which fills all space and time. Every object, animate or inanimate, is a weapon both of offense and of defense. In the inanimate world individual events affirm themselves and defend themselves against one another according to the law of inertia. Inorganic matter is all battering ram and resistant rampart. In vegetable and animal organisms we find all sorts of devices for attacking and for warding off attack. Living matter

is all tooth and claw, all breeding one's own, and feeding upon every other form of life.

At last the Will creates in the human intellect its most efficient instrument of survival and destruction. The power of reason to generalize and predict gives the human mind a capacity for anticipating new situations and dealing with them in the light of former occurrences. Knowledge is a long-range gun that enables the Will both to kill at a distance and to lay down a barrage against advancing death before it comes too near. Reason, then, is only an instrument evolved like tooth and claw in the interest of self-preservation.

V. THE SEARCH FOR SALVATION

No Salvation in Western Ethics. Is there, then, any hope of salvation from such a universe? Scanning the world in which he lived, and contemplating its organization, its ethics, its religion, and its philosophy, Schopenhauer could find none. For all alike were bent on glorifying the Will to Live. All western civilizations sought salvation in more and more life, more and more satisfaction, in action, and progress, and so-called betterment of the world by good works. This self-perpetuation of the Will was justified by systems of morality that stressed the ethical value of suffering in the formation of character, by religious doctrines that sought to consecrate suffering and make it expressive of God's purpose, and by philosophies like Fichte's and Hegel's that found in contradiction and conflict indispensable conditions of the Absolute's perfection.

What we must do, or rather not do, to be saved, if salvation is possible, is clear enough. We must strike at the root of all evil and kill the Will to Live. We must stop desiring anything, stop willing anything, stop struggling, stop striving, cease from uplifting, cease from progressing. Thus and thus only can suffering be destroyed and peace attained. But does it lie within the power of the Will to turn upon itself in its entirety and to deny and extinguish itself?

The promise that this might be so and the hope of salvation that flowed from such a promise Schopenhauer found in Greece and in the East. Plato and the Buddhist sages were the harbingers of the dawn. The one might seem to promise respite from the Will to Live, albeit momentary, here and now. The others held out a hope of negating it once and for all.

Temporary Escape from the Will. The third and fourth books of *The World as Will and Idea* explore the way of salvation. From the

phenomenal world, Schopenhauer continues, we have nothing to hope and everything to fear. For it is the phenomenal world that is the arena of desire, and struggle, and strife, and suffering. But let us take another glance at the forms and types and laws which constitute the Form of the universe, and the Truth about it. Like the Will itself, they are eternal, changeless, and above causality. They are beyond strife, harmonious with each other, and unaffected by the birth, the conflict, and the death at one another's hands of the phenomena that exemplify them. This hierarchy of Forms in which the Will *objectifies* itself Schopenhauer calls the world of Platonic Ideas.

These Ideas, though primarily created by the Will to Live as instruments of self-affirmation, also may be *contemplated* for their own sake and as ends in themselves. This power of *contemplation* arises, it would seem, from the fact that the intellect generates more power than it needs to perform its primary function of serving the Will, and that the excess is drained off by passing from the practical applications of the universal to the particular to an impractical, theoretic interest in the universal itself. Under certain conditions the theoretic interest may suspend the practical interest. When this takes place, knowledge is freed from subservience to the practical exigencies of the Will, and becomes an end in itself, and the pleasure attending it is not adulterated or followed by surfeit and pain. At such moments the Will is completely satisfied and ceases to desire.

Furthermore, when the intellect escapes the clutches of desire, the individual is freed from the bonds of his own particular nature and personality. His attention is freed from attending to the practical and particular bearings of things upon his own life, and becomes absorbed in their eternal and universal aspects. He forgets himself and loses himself in the object of his contemplation, and at the same time forgets what is temporary and accidental and insignificant in that object. Viewing "under the aspect of eternity" both himself and that which he beholds, he is no longer an individual and a person. He is a timeless, will-less, knowing subject, raised by identification with the eternal above the flux and strife of the phenomenal world and the tyranny of willing and desiring to the calm in which the Ideas dwell.

The Esthetic Escape from the Will. The pleasure attending the pure *contemplation* of the Ideas is *esthetic satisfaction*. The Ideas themselves, regarded now not as means to further striving, but as visions to be entertained for their own sake, become things of *beauty*. The *artist* is distinguished from other men by his peculiar ability to forget the *practical* bearings of the phenomenal world upon himself and

others, and to penetrate and to contemplate the Ideas, and to express them and his joy in contemplating them to his fellow-men through his work. Thus he is in a way a savior, since in revealing beauty and arousing esthetic satisfaction he gives peace and cessation from desire.

VI. THEORY OF ART

The Beautiful and the Sublime. We are thus brought to Schopenhauer's theory of art. We may begin our discussion by pointing out that we are already in a position to distinguish the beautiful from the sublime. The sense of beauty is associated with the contemplation of phenomena agreeable and friendly to ourselves. In their presence we can lose ourselves spontaneously and without effort in the object of our contemplation. But when we contemplate the Ideas of phenomena hostile to ourselves, self-forgetfulness is difficult and requires effort in the face of the practical bearing upon our lives of the object in question. However, in rising above the hostile aspects of the phenomenon to contemplation of its Idea, we have a sense of triumphing over the terror inspired by its unfriendliness towards us. It is the injection of the sense of triumph into the pleasure of contemplation that gives us the feeling of the *sublime*.

The Constructive and Pictorial Arts. Passing now to the different arts, we find that they may be arranged in a hierarchy corresponding to the scale of ascending grades of the objectification of the Will. At the bottom of the scale are the blind, mechanical forces of nature. Architecture is the art that seizes and sets forth the Ideas manifested in the inanimate world. It contemplates the properties of matter, such as gravity, cohesion, rigidity, fluidity, and the reflection of light. And it builds with beauty according as it succeeds in revealing these material forces and properties in perfect harmony and balance. For this reason, Schopenhauer prefers classical architecture to all others. In it the equilibrium which holds the secret of architectural beauty is most clearly seen. Gothic architecture, on the other hand, he regarded as a mere makeshift, due to the inclemency of the northern climates. Snow and rain make high-pointed roofs and vaultings necessary, but they represent an interference with esthetic design by unfortunate but necessary concessions to practical exigencies.

A step above architecture comes landscape painting, which also reveals forms and laws lurking behind inanimate nature. In both it and architecture the liberation of the individual mind from the tyranny of the Will to Live counts for much more than any revelation these arts

may give of the deeper significance of the phenomenal world. The Ideas first begin, as it were, to acquire depth when living beings are concerned, and it is by arts whose subject matter is animate that the more profound meanings of existence are brought out.

The most superficial of the deeper arts are animal painting and sculpture, which display the Ideas exemplified in the lower orders of animate things. Next come painting and sculpture of the human form. Sculpture catches the outward beauty and grace of the human being, but is not well adapted to seize and portray inner life and character. This is better done, though not adequately, by painting, and especially by portrait painting. Portraiture displays the nature and Idea of the individual person, in so far as it is possible to display it within the limitations of the materials, like paint and canvas, with which the artist is forced to work.

The great art for representing the Idea of man in all its complexity is poetry, which is able also in its descriptions to transmit the other Ideas. The highest kind of poetry is tragedy. For through tragedy we feel most intimately and directly the blindness of the Will and the strife and suffering with which its objectifications are infected.

Music. One art, music, remains to be mentioned. In Schopenhauer's opinion, it is unique. It is not, like the other arts, the manifestation of some definite Idea or Ideas. Nevertheless, it liberates the human mind more completely from servitude to the Will than does any other form of esthetic satisfaction. Why is this? The answer Schopenhauer finds in the peculiarly intimate relation music bears to the Will. Instead of revealing an Idea in which the Will is objectified, it reveals immediately the nature of the Will itself. Music is a direct *objectification* of the Will, parallel to the expression given the Will by the Ideas. Unlike the other arts, its works are not copies of copies but first-hand imitations of the original.

The parallelism between the direct expression of the Will in music and its indirect expression in the other arts by way of the Ideas is seen in the musical scale. The bass notes correspond to the forces of nature. The treble, which carries the air and motif, corresponds to the higher objectification of the Will in human life. Musical intervals run parallel to the grades of objectification. The variations from and returns to the key in a motif represent the restless striving and outgoing of man's experience and its ceaseless recoil upon itself. The different musical tempos reflect his various moods. Music, then, is the only art to penetrate to the core of the Will and to express directly its essence without the need of intermediary Ideas.

VII. DEATH NO ESCAPE

But the Will cannot find any enduring and final peace in the contemplation of what, after all, are means it has devised for living, and, in living, for craving, struggling, and suffering. The forces and forms of nature, the human body, the character of the inner man, the episodes of human life, with which art deals, are but assertions of the blind impulse to exist. Ultimate salvation must come, not by throwing sops to the Will to quiet it, but by extinguishing it altogether. The Will must turn upon itself and of its own volition deny and destroy itself. How this mystical act of self-renunciation is possible Schopenhauer learned from the Buddhists and expounded in the fourth and last book of his chief work.

The way of escape, he remarks at once, is not by the gate of death. The Will, being a thing-in-itself, lifted clear of time and change and causality, can never die. Only its individual manifestations come into being and pass away. It follows that just as our birth does not bring the Will to Live into existence, so our death cannot destroy it. In that sense, we are, if you like, deathless. But such deathlessness must not be confused with personal immortality. There is no survival and persistence of individuality. *I*, in so far as I am a person and an individual, belong to the phenomenal world, and, like everything else in that world, am transient and dissolving.

By my death, then, the *Will* is not freed from living, and the life that I was is succeeded by another. Nevertheless, death should have no terror for us. For it is precisely to the extent that we are individual and personal that we are enslaved to the Will, and therefore *live*. And *life*, as we know, is evil, is all restlessness and unsatisfied desire, all defeat and failure and suffering. The most happiness we can expect from it is some surcease from pain. Why, then, be terror-stricken by the knowledge that *my* life will soon be over, and that in a brief moment *I* shall be gone? For at least I have the assurance that when I am dead the Will can never again suffer in *me*.

VIII. TRUE MORALITY AND SALVATION

Intelligence and Existence. Since the death of the individual involves no renunciation of life in general on the part of the Will, we must look elsewhere for our hoped-for salvation. We turn once more to the intellect, which in its contemplative activities found even the

structure of an evil universe beautiful, and succeeded by means of that beauty, albeit only for a moment, in denying itself. But these contemplative activities have also a *practical* use, since they enable us to *comprehend* the evil character of the Will to Live and its works, and to *reason out* the true way of salvation.

As *thinking* beings, for instance, we can be *intelligent* in our appraisal of the ethical situation, and can detect the errors of a moral system founded on the affirmation of the Will to Live. We begin our criticism by grasping the true nature of the eternal justice manifest in the world. Since the same Will affirms itself in both the criminal and the victim of his crime, all crime is futile. Every act of violence against another is really an act of violence against one's own deepest self. In the very commission of a criminal act the victim is avenged and the perpetrator is punished, since the Will, in instigating the violation of one of its manifestations by another, has done no more than to violate and inflict pain upon itself.

Again, the intelligent eye perceives not only the futility of wrongdoing, but the equal futility of remedial and practical right-doing. The so-called virtues only help the Will to continue its affirmations and thus prolong the evils of existence. So, too, the punitive and repressive measures inflicted upon the criminal by society as retribution for his evil acts seem unintelligent to the enlightened mind. Nothing could be more senseless and evil than taking *vengeance* upon wrong-doers, since in taking vengeance the Will is only adding to the sum of suffering and evil with which all existence is infected. Punishment for the sake of punishment is stupid and immoral.

Nor is *corrective* punishment in any better standing. Corrective measures aim at no more than the sinner's repossession of virtues that are not only valueless but are positive means to continuing the Will to Live.

The Intelligent Attitude Towards Evil-Doing. The intelligent attitude towards sin and crime, the attitude decreed by knowledge and understanding, should not be one of indignation and hatred and loathing. It should be inspired by the Buddhistic feeling of compassion for the sins and sufferings of the whole world. For all men are in their essence one and the same with their fellows. The sin of one is the sin of all. The suffering of one is the suffering of all. The same Will sins and suffers in them all. Every human individual bears vicariously the sum total of the evil which constitutes existence. The rain of the same compassion, then, should fall upon the good and the evil alike.

The way of salvation lies at last clearly before us. It is pointed out

to us by Hindoo philosophy and especially by Buddhism. To tread it we must accomplish a complete revolution in the scale of moral values to which we have been accustomed. We must *renounce* the Will to Live and all its works and "virtues." We must withdraw ourselves through ascetic discipline from the world and worldly things, whether these things count as good or bad. *We must will not to will.*

Salvation by Denial of the Will to Live. This we can only do if we break every attachment of interest and desire that binds us to the phenomenal universe and to the Platonic Ideas that form its structure. All our natural impulses must be curbed and mortified. Particularly, the sexual instinct must be repressed and extinguished. For the sexual instinct is the strongest, the most fundamental, the most unruly, and the most dangerous of all the affirmations of the Will to Live. Then, too, if it could be totally denied, and if consequently the human race could die out, the intellect and knowledge and the more complicated and complete objectifications of the Will would pass away.

Nay more, with human consciousness all other grades of consciousness would disappear, as twilight disappears with the extinction of light. Abolition of knowledge and of the Platonic Ideas would involve the destruction of phenomena and of sensible experience, which can only exist under the forms provided by the Ideas. Finally, with the destruction of experience and thought and self-consciousness, the Will to Live, also, deprived of its expressions, would be laid at rest.

Furthermore, he who attains salvation for himself vicariously atones for the sins of the whole world and effects its redemption. The *whole* Will is denied by each saint and sage who enters what we may now call Nirvana.

The Spontaneous and Miraculous Character of Salvation. But, we may still ask, is salvation possible? Is not the Will bound by its very nature to affirm itself, to objectify itself, to strive, to struggle, and to suffer? In that case, no amount of renunciation and denial on our part can overcome the Will to Live, and no salvation is possible. Schopenhauer replies that there is nothing in the nature of things that renders our hope of liberation vain. We must not forget that the Will is *absolutely free*. Having no nature to determine it, prior to its objectification, it is not even self-determined to live and to express itself as it does. Its objectification and its appearance as a phenomenal world are a miraculous act for which no reason can be given. Conversely, there is no reason why the Will should not in a similarly miraculous manner refrain from objectifying itself, dissolve the phenomenal world into nothing, and cease to affirm itself and to live.

The act, then, by which the individual denies the Will to Live is mystical and spontaneous, arising, for no reason whatsoever, from something in him deeper than reason, deeper than existence, deeper than willing itself. Being spontaneous and unmotivated, it appears to be supernatural and effected, as it were, by a divine grace bestowed by some agency outside the individual himself.

The Positive Nature of Nirvana. One last difficulty. Is not the state of a Will that has ceased to affirm itself, and that has renounced and denied the very activity of willing, equivalent to nothingness? No. Nirvana, into which the Will, redeemed from affirmation and willing, at last enters, is, indeed, indescribable in any terms of our finite experience. We have no predicates or epithets at hand that we can apply to it, since all categories and epithets and attributes are drawn from and can be applied to the *affirmed* Will alone. Relatively to anything *we* can know, or perceive, or feel, or will, Nirvana is indeed nothing, and the state of the Will that has denied itself and entered Nirvana is, indeed, pure emptiness. But in itself it is not negative. It is a positive bliss beyond all thought and speech. To the Will that has become will-lessness and has attained this bliss, the relation is reversed. To it, *our* existence, *our* universe, with all its suns and stars and milky ways, "*ist als Nichts*," is as nothing. For in relation to it, our world, the world of the affirmed Will, is a complete negation and emptiness of what is really real.

Chapter XIX

HERBART

I. KANTIAN BASIS OF HIS PHILOSOPHY

Life. Johann Friedrich Herbart was born at Oldenburg in 1776. He studied philosophy at Jena, under Fichte, and in the end was profoundly dissatisfied with the Fichtean interpretation of Kant. In this way he was led to undertake by himself an independent study of the *Critiques*. After receiving his degree at Jena, he was tutor for some years in a family in Switzerland, and put in his spare time working out his own system. In 1805 he was called to Göttingen to lecture on philosophy, and in 1809 accepted the chair at Königsberg, which Kant had formerly held. Here he remained till 1833. In that year he returned to Göttingen as professor of philosophy, and died there in 1841.

Attitude Towards Kant. Herbart accepts the Kantian, and, for that matter, the post-Kantian idealistic hypothesis that experience gives us only phenomena. He accepts also with Kant, but in contradiction to the idealists, the hypothesis of things-in-themselves existing independently of experience. At the same time, he realizes that the idealists have good ground for complaint against things-in-themselves and for discharging them from their systems. For, in his opinion, Kant had failed to show that experience necessitates an assumption of their existence, and conversely had been unable to demonstrate how, given such entities, experience could be deduced from them. Herbart proposes to succeed where Kant had, in his opinion, failed.¹

We begin with *experience*. It does not in itself convey any *knowledge* of anything. On the face of it, it is unintelligible, since it is not self-explaining and self-supporting. Nor does it hang together systematically. Its transitions do not reveal their why and their wherefore. Still, it occurs in an orderly manner, and proclaims itself to be experience of something more than itself, even if it cannot tell what that something more is. Moreover, it does quite definitely state that experience is *not* of more experience. We do not perceive our perceptions. For, in that case, since perceptions are perceptions of, we should find ourselves

¹ Cf. Herbart's *Hauptpunkte der Metaphysik; Allgemeine Metaphysik*.

involved in an infinite regress of perceiving perceptions of perceptions of perceptions, world without end. Experience, then, must be of something that is not experience, which we will call the Real.

II. THE NATURE OF REALITY

Reality Simple, Changeless, Self-Sufficient. The question now arises whether experience and reasoning can give us any *knowledge* of the nature of this Reality. Herbart thinks they can. In the first place, since contradiction means unreality, to be *real* is to be free from contradiction. Again, what is *real* must be positive and *self-sufficient* and *independent* of everything else. It must be absolutely *simple*, since complexity and qualification of any sort require explanation. It cannot be quantitative or extended, since it cannot be divided or exist in varying amounts or degrees. It cannot change, or become, or move, since it cannot be or become other than it is.

Reality Many, Not One. Furthermore, we can *know* that the Real is *many*, not *one*. The multiple and variegated character of experience, and the unique and reciprocally exclusive character of its parts, can only be explained on the hypothesis that each incident is the appearance of a separate and unique Real. The number of these Reals, like the variety of experience, is indefinite.

Again, the *plurality* of the Reals, as well as their changelessness, is demonstrated by the fact that phenomena *do not turn into*, but *succeed*, one another in our experience. Since the Reals are not in time, this temporal succession of their appearances must be within our minds and due to a subjective relating of the Reals to one another on our part. The same is true of the apparent *causation* of one experience by another. Each experience and each property of a so-called "thing" is explained only by its particular, underlying Real, and the seeming causal interconnection of experiences is due to the mind's relating a plurality of Reals, each one of which accounts only for a single experience or property. So, too, the clustering of many qualities in a single object is an act of similar interrelation by the mind. The Reals themselves cannot become parts of larger wholes. Finally, we can deduce from the *variegation* of experience and the *difference* of the many qualities appearing in it, that the Reals, also, underlying this diversification, are *different* as well as many. However, the diversity that appears in the content of our experience can give us no hint of what the different natures of the Reals are really like.

III. THE MIND OR SOUL

We are now led to ask what *experience* is, and what the *mind* is. It would seem at first sight as if the mind's *relating* of the Reals had nothing to do with them, and as if experience, whose content and relations are purely subjective, was wholly irrelevant to the nature of Reality.

This difficulty Herbart meets by pointing out in the first place, that though our "relating" of the Reals does not influence the structure of Reality, the structure of Reality does influence the way in which we relate things-in-themselves as they appear in experience. Moreover, he continues, the mind, or soul, is itself a cluster of Reals and as such shares all the qualities of Reality—its simplicity, indivisibility, changelessness, etc. Our changing, moving variegated experience, which appears to be at variance with these characteristics, is merely the expression of the *resistance of a psychic Real like the soul to the disturbing influences of the other Reals*. The soul, like every other Real, seeks to *preserve* its unique character, and *experience* is its registration of the counterbalance it establishes in preserving itself unspotted by influence from without.

All the Reals tend to encroach upon and modify one another, and all of them *resist* encroachment and modification on the part of the others, and thus *maintain* their unique and simple natures. The non-psychic Reals do not *recognize* this fact. The psychic Reals, that is, minds or souls, *register* it, and *consciousness*, or *experience*, is that registration.

IV. THE SIGNIFICANCE OF THE SPATIAL, TEMPORAL, CAUSAL AND MATERIAL ASPECTS OF EXPERIENCE

Nature of Space and Time. We are now in a position to understand more clearly the significance of experience, and to throw more light on the world of things-in-themselves. *Space*, Herbart tells us, is the way in which a psychic Real *must* represent in experience the existence of a *plurality* of Reals. The discrete, unique points into which its seeming continuity is divisible are our way of registering this plurality and the reciprocally exclusive character of things-in-themselves.

Time, with its concomitant *change* and *motion*, gives us another hint as to the nature of Reality. The discrete instants into which its flow may be broken up are another witness to the fact that Reality

is many, but their succession, and the incidental change of place and quality that accompanies it, suggests that the Reals themselves, though immune to internal alteration, *shift* their relations to one another, or, in other words, the pressures they bring to bear upon one another and the resistance they offer to such pressures.

This situation in the world of things-in-themselves, which the nature of experience would seem to indicate, Herbart expresses by saying that the Reals are "together," and that their *togetherness*, or *Zusammenheit*, *varies in degree*. That is, the Reals *can be more or less together*, and exert more or less pressure, and offer more or less resistance, or none at all, among themselves.

Causality an Expression of Pressure and Resistance to It. The *causal* aspects of experience bear, in Herbart's opinion, further witness to this situation. Events in experience that *do not cause* one another are the conscious registration of Reals that are *not together* and that therefore are *not* pressing upon and resisting one another. Causal connections in experience mean that the Reals involved are *together* and are exerting and resisting influence upon one another.

In a way, then, the Reals themselves exhibit a relation of cause and effect. Their *togetherness* evokes *resistance* to one another. They influence one another *not* to be influenced by one another. The Reals, then, are not free and self-determining. They *force* one another to preserve themselves. Each Real is necessitated to behave as it does by the presence of the others with which it is *together*.

The temporal, antecedent and consequent character of causation in our experience has no place in Reality. The interaction between the Reals is immediate and simultaneous. So, too, the apparent *expenditure* of force in experienced causation is purely subjective. The Reals cannot *expend* force in influencing one another, since such expenditure would imply change and motion within themselves.

Nature of Matter. We come now to *matter*—to the fact that space and time have a stuffing or *content*. This, according to Herbart, throws more light on the nature of Reality and suggests a somewhat more complicated situation, involving as it does the *difference* as well as the *togetherness* of the Reals. The Reals are always as much *together* as they can be, but the degree to which they can "get together" depends upon the degree of their *likeness* to one another. This degree is represented in the experience of a psychic Real, or mind, by the degree to which experienced phenomena can and do coagulate, combine, mix, and fuse, or, in other words, by the degree to which they seem to occupy the same space and the same instant of time. Indeed, if all

the Reals were exactly alike, their *togetherness* would be complete, in which case the spatial and temporal extension of experience would contract to a single point and instant, and vanish altogether.

The spatial points and temporal instants of the experience of a psychic Real are then *held apart*, or *forced apart* by the difference of the Reals underlying them. And this holding apart or *repulsion* of one point by another will be strong in proportion to the difference, and concomitant inability to *get together*, of the Reals these points register. Conversely, the similarity of the Reals and their consequent tendency to be *together*, will display itself in experience as an *attraction* exerted by one point of space upon another. And the total situation in the world of things-in-themselves, in which Reals of various degrees of likeness and unlikeness are proportionately influencing one another and resisting one another's influence, and tending to come together or to hold one another off, as the case may be, is represented in consciousness as by the tautness and tenseness of space and time and the shifting equilibrium of phenomena.

Space and Matter. But, when points of space exert and resist a pull upon one another, and by their attraction and repulsion hold each other firmly in place, they introduce a *rigidity* and *solidity* into extension, which we call *matter*. For example, a molecule represents a coagulation of Reals, which, cling and squeeze as they may, can never get entirely together because some of them are unlike. And when several coagulations of this sort start attracting and repelling one another, their reciprocal influences and resistances are represented in consciousness by larger corporeal masses. Matter, then, like space and time, can only appear when a psychic Real is together with a plurality of other Reals, and when some of these Reals with which it is together are different from one another.

Space, time, matter, and motion are not, then, entirely *subjective*, as Kant supposed them to be. They are, indeed, the necessary forms in which any conscious Real whatsoever must represent a plurality of distinct, independent things-in-themselves. But consciousness would not so represent a Reality that was not multiple and the relations between whose constituent parts were not shifting. Hence these forms of experience are dependent upon the *two* factors of a conscious thing-in-itself and of other things-in-themselves in variable relations with each other and with it.

The fact that the Reals *shift* their relations and *vary* the degree of their *togetherness* is ultimate. It can no more be explained, and requires no more explanation, than their plurality and their various

degrees of likeness and difference. All we can say is that this is the sort of Reality which experience seems to indicate.

V. THE PLURAL CHARACTER OF THE SELF

Each Item of Experience Separately Conscious of Itself. Hitherto we have spoken of a psychic Real, or mind, as if it were itself a single, simple, unique thing-in-itself—a sort of Kantian or Fichtean *ego*. But we have no right or reason so to treat it. Not only does the hypothesis of a perceiving “self” separate from experience involve us in an infinite regress of perceiving that we are perceiving that we are perceiving, but the self-consciousness that accompanies one datum of experience cannot be identified with that which accompanies another, different datum. There are as many perceptions that we perceive as there are perceptions.

The “self,” then, like experience itself, and like any of the *things* given in experience is simply a coherence of a plurality of experiences, and its multiplicity in unity may be explained in the same way that the co-existence of attributes in any object is explained. Just as in the case of a *thing* we are obliged to posit as many things-in-themselves as it has properties, and to base each quality upon a separate Real, so in the variety of my consciousness, or your consciousness, we must assume as many underlying things-in-themselves as there are items of consciousness. Each one of these items, along with the “I know” that accompanies it, represents a different psychic Real. The so-called Ego, then, is multiple. Nor does the self-consciousness attending any datum of sensation come any nearer to expressing the true nature of a psychic thing-in-itself than does the datum itself.

VI. THEORY OF KNOWLEDGE

Since the character neither of experience nor of self-consciousness can in any way picture the character of things-in-themselves, it might seem as if any knowledge of any sort of either the existence or the nature of the Reals was impossible, and as if the metaphysical inferences made by Herbart were completely unjustified. His answer is that knowledge does not lie in *picturing*, and that experience need in no wise *resemble* the Reals in order to be the basis of real knowledge about them.

Thus the inescapable presence of experience, its uncontrollable and unalterable character, and its persistent and inextinguishable external

reference enable us to *know* that an external, independent Reality *exists*, and its unchangeable and invariable *order* enables us to *know* that Reality must be plural, of varying degrees of likeness and unlikeness, and of togetherness and apartness in its internal relations. So much we *must* infer from experience, but so much is all we *can* infer. How many Reals there are, in what their differences consist, and what the actual shifting of their relations is really like, are questions upon which experience throws no light, and which we therefore can never *know*.

Incidentally "general" and "abstract" ideas have no metaphysical significance. They are mere abbreviations for groups of sense data, and do not in any way enlarge or deepen our knowledge. They come no nearer to describing the nature of the Real than do the experiences from which they are drawn.

VII. PSYCHOLOGY

The Nature of Volition. Herbart's psychology ties in with his metaphysics. He warns us against regarding consciousness as either an *activity* of a psychic Real or as a *passive* reception of impressions by it. Activity and passivity are forms of experience and cannot be predicated of things-in-themselves or of their relations to one another.

The *seemingly* active character of the psychic Reals, as evinced in the phenomena of desire, impulse, and volition, is an expression in experience, Herbart tells us, of the tendency shared by the psychic Reals with all other Reals to be in as complete as possible a state of *togetherness* and equilibrium with other things-in-themselves. But the mind, or soul, in experiencing, is *together* with non-psychic Reals both unlike itself and unlike one another, which are therefore more or less influencing it and one another, and provoking more or less resistance to such influence. Hence the items of experience registering this complex and shifting inter-relation of the Reals will tend to balance and check and inhibit one another just as the Reals they represent are doing.

Seeing, however, that *togetherness* is always at a maximum, there will always be the least possible amount of inhibition of one item of experience by another. In other words, every perception and idea will seem as vivid as it can seem, and will appear in consciousness, not merely as a representation, but as a representation that *strives* to maintain its vividness against the inhibiting influences of other experiences. Hence ideas will give the impression of competing with one another,

and experience will be suffused with a tenseness and an awareness of struggle and effort. It is this tense, driving aspect of experience that we call volition.

Inhibition and "the Threshold of Consciousness." Again, and on this point Herbart is insistent, sensations cannot *destroy* one another. The utmost they can do is to *arrest* one another. But each sensation, though arrested, preserves itself, and when the pressure, which is always the least possible, is removed, it tends to reassert itself. And, according as the relations among the Reals vary, so sensations rise and fall in the intensity of their presentation and their clearness.

Herbart feels, moreover, that a thoroughly scientific statics and mechanics of consciousness can be established, and that exact mathematical formulae can be worked out for the equilibrium and the shifting of conscious data.² For example, the degree of pressure necessary to remove a presentation from consciousness, or, as Herbart put it in one of his most famous phrases, to "sink" it beneath "*the threshold of consciousness*," is exerted by the inhibitory idea in inverse proportion to their respective strength. Again, the pressure lets up as the conscious data upon which it is exerted "sink," with the result that the velocity with which they approach the threshold of consciousness is retarded according to a set mathematical formula. Conversely, presentations driven below the threshold of consciousness by the pressure of other conscious data reappear when the inhibitions are removed, and in so doing bring with them, once more in a manner expressible in a mathematical equation, the other presentations with which they have been associated. The behavior of memory and of the association of ideas thus becomes subject to precise scientific determination.

Pleasure, Pain, Desire, and the Self. Upon this mechanical foundation Herbart builds up other states of consciousness. *Pain* is indicative of the fact that a given presentation is being batted back and forth by other presentations, some of which tend to sink it below the threshold of consciousness, others to raise it above the threshold. *Pleasure* means that the situation is generally favorable to its appearance in consciousness. When we *desire*, data are elbowing others out of the way that prevent them from rising to the surface and being experienced. When a group of presentations has become established in such wise that it suppresses re-emergent items that were not or will not be "together" with it, and attaches to itself re-appearing data that were or may be associated with it, we get a consciousness that remembers its own past and anticipates a future of its own. That is, we get a *self*. -

² Cf. *Psychologie als Wissenschaft*.

There is, however, no one abiding, central presentation by which the self is constituted. On the contrary, the elements of the self-conscious mass are always shifting, as they keep step with the shifting relations of the plurality of underlying Reals. The ego is simply an abstract expression for the fact that, in spite of the shifting, the shedding, and the accretion that take place, the elements of the central core are congruous and "together" with one another, and in the aggregate resist disturbance and disintegration by external influences.

These conclusions were of great significance to the history of psychology. They helped break down the faculty-psychology which had hitherto dominated German thought, and whose influence is so patent upon philosophers like Kant and Hegel. The concept of the "threshold of consciousness" was later developed in the ideas of the unconscious, the subconscious, the subliminal, etc., which play so important a part in modern psychology. So, too, the "inhibition" of ideas by one another and the tendency of inhibited ideas to struggle against suppression, to reappear when the censor is off guard, and during suppression to set up obscure drives and conflicts and strains, are prophetic of the central concepts of the psychoanalytic school. Last, but not least, Herbart's attempt to study psychological phenomena in the same spirit and by the same methods that obtain in the physical sciences gave a great impetus to the development of psychology as an exact science and to its detachment from metaphysics. To him we owe our hope of subjecting mental occurrences to the minute and rigid analysis, the precise measurements, and the mathematical formulations, which have proved so successful in dealing with physical events.

VIII. ETHICS, EDUCATION, AND RELIGION

Ethics. For Herbart, *ethics*³ is another expression of the metaphysical situation of togetherness, shifting relations, tendency to self-preservation and establishment of equilibrium, which are characteristic of Reality. Pleasurable and beneficial experiences, or, in other words, experiences more or less unanimously "voted in" by the central core of representations which constitutes the "ego," tend to be preserved by their "togetherness" with it. The more congruous the representations that push themselves across the threshold of consciousness are with the ego, the *freer* we feel our wills to be. The more varied and intense the representations than can occupy consciousness without disturbing the concentration of the ego the more self-realized and

³ Cf. *Allgemeine praktische Philosophie*.

perfect and happy we are. The more "together" the representation of our own will can be brought with our representation of another's will the more *benevolent* is our disposition. When wills clash, we represent their "togetherness" and equilibrium under the concept of *right*. If an ego revolts against that equilibrium, we demand that it be re-subjected by meting out *retribution* to it. If the self tends to maintain the harmonious counterbalance, we speak of it as deserving to be praised and *rewarded*. Out of these representations and the relations underlying them the whole complex structure of ethics and social organization can be evolved.

At the same time, Herbart feels that, although valid general moral principles can be laid down, the applications of them to individual conduct must not be too rigid and must allow for the great variety and difference of human temperaments and circumstances. Each case should, as far as possible, be decided on its own merits. There must always be a compromise between the real and the ideal. The aim of education and of political organization should be to adapt the general to the particular and the particular to the general.

Education. The scientific tone of Herbart's psychology and ethics is reflected in his views upon education—a subject that deeply interested him. He could not see eye to eye with Rousseau and Rousseau's theory of allowing the child to develop along its own lines and in its own way. Nor could he agree with his contemporary Froebel, or with the older Pestalozzi, who were founding their systems of education to a large extent upon Rousseau's ideas.

On the contrary he felt that the child should be subject to discipline from the beginning. It is the function of education to mold the child, not to leave him to his own devices. It should supervise and direct his development with a view to making him as "all around" many-sided a man as possible, endowed with as many interests as can be inculcated and fostered in him. Above all, the teacher should seek to consolidate all these interests with which he is trying to imbue his pupils, in a unified moral character dominated by ethical ideals.

Religion. The chief function of religion is to reinforce ethics by giving, in the idea of God, a beautiful and appealing concrete expression to moral ideals, and by encouraging the hope and the belief that these ideals and the pursuit of them have some sort of cosmic backing. To be sure, it is within neither the power nor the province of philosophy to think up *arguments* favoring the existence of such backing, or generally to support theological hypotheses. Still, the behavior of the experience we call "nature," and particularly the purposive char-

acter of the activities of those phenomena we call "organisms," permit the *belief* that there may be among the Reals a divine Real that governs the shifting of their relations, and the changing degrees of their togetherness and apartness, with some end in view. The philosopher will observe and note the permissibility and possibility of such an inference, but it is not his business to try to validate it.

Chapter XX

MINOR EARLY NINETEENTH-CENTURY CONTINENTAL PHILOSOPHY

I. MINOR POST-HEGELIANS

Before crossing the frontier and examining elsewhere the philosophy of the first half of the nineteenth century, we have still to note commotions provoked in Germany by the Hegelian philosophy. Some of the philosophers whom we shall examine did, indeed, live on into or through the third quarter of the century, but for the sake of convenience we may deal with them now. As may be imagined, Hegelianism made a great stir, not only in metaphysical circles but among the theologians and the political thinkers. Its implications in all three fields were revolutionary in character, and calculated to provoke not only enthusiastic support but violent opposition. We shall deal with the metaphysicians first.

Beneke. Beneke (1798-1854) protested against the entire *a priori* method of the Kantian and Hegelian philosophizing. We must begin with experience and stick to experience, he said. Starting, then, with experience, what does it permit us to *know*? First, and immediately, the self, and by inference the existence of an external physical world and of other selves. Furthermore, the spatial and temporal forms of experience are not wholly relative to *human* consciousness. They are possible forms of all conscious existence and, therefore, of Reality itself. So, too, we directly *experience* causality, since we are conscious of ourselves as the reason why sensations and feelings are present to us. We can also infer, though not with certainty, the existence of God both from our moral needs and the fragmentary and partial nature of our experience.

As a psychologist Beneke ranks higher than as a metaphysician. Indeed, to some extent he shares the honors with Herbart as one of the founders of modern psychology. He supplemented his metaphysical assertion of the fundamental character of experience and of the self, with a scientifically conceived and applied study of consciousness that

makes him an important figure in the development of the *introspective* method.

Weisse. Next to Schopenhauer and Herbart, however, the most eminent of the early anti-Hegelians was Weisse (1801-1866). He attacked Hegel for giving too much weight to the claims of logic in determining the nature of the Real, and not enough to those of art and religion. For that matter, art and religion bring us nearer to the heart of things than any amount of scientific and philosophical thinking can. If we followed out Hegel's doctrines to their logical conclusion, we should be forced to deny God, freedom, and immortality.

To these charges Göschel, a favorite pupil of Hegel's, replied with some warmth. A controversy ensued, Weisse publicly renounced Hegelianism of any and every sort, and in his *Metaphysics* once more denounced Hegel's determinism and godlessness and opposed to them his own conviction that men are possessed of free will and that there is a personal God. The Catholic Church, also, became involved in controversy in the person of a priest named Günther, who countered the idealism and the latent pantheism of both Schelling and Hegel with a dualistic conception of the Creator and the created, and, within the created, of mind and matter. Apparently, however, Günther's attack upon Hegel carried him beyond the bounds of strict orthodoxy, since his system was not altogether favorably received by the Church.

Schleiermacher and Strauss. The theological reverberations of Hegelianism were even more stirring. Schleiermacher (1768-1834) had already hinted that Christian theology was not so much a description of objective, metaphysical truth as a symbolic expression of man's subjective moral and religious experience, which is in itself inarticulate and inexpressible in any but figurative terms. This subjective appropriateness he did, indeed, feel to be so complete that we could not help believing also in the objective validity of Christian doctrine. But the accent had been shifted from the factual and historic aspects of Christian theology to its inner, emotional and symbolic applicability.

This question, the keen edge of which had been blunted by Schleiermacher's deeply religious nature and personal piety, was now sharply raised. Naturally it cut most deeply into the three central problems of Christian theology—the personality of God, the nature of Christ, and the freedom and immortality of man. And it drew the most blood from the first two.

In 1835, Strauss (1808-1874) published his famous *Life of Jesus*, in which he attempted to show that in the Gospels we have neither history nor deliberate invention, but unconscious poetry and myth, woven

partly out of the Jewish expectation of a Messiah and partly out of the impressions Jesus made upon his disciples. The Gospels, then, give us not the man Jesus, but the Christ-myth of which he became the center. In raising Jesus to divinity, the poetic imagination was simply constructing a symbol of the essential divinity of all men.

The Hegelian Right and Left Theological Disputes. The uproar was terrific. The Hegelians fell apart, to use Strauss's own phrase, into a Left and Right, and the controversy soon spread from the Christological problem and involved the nature of God himself. The Left, accepting the teaching possibly implicit, if not explicit, in Hegel, that theological concepts are imaginative transcripts and illustrations of the nature and operations of the Absolute Idea, divided over the question of where the precise basis of the symbol was to be found. Strauss himself was pantheistic, and maintained that there is no God except the thought which is in all thinking beings, no attributes of God which are not the laws of nature, and that the word "God" is simply another name for the infinite totality of existence.

Feuerbach (1804-1872), on the other hand, was unwilling to ascribe any objective reference to the concept of God. Theological dogma is purely *subjective* in origin and crystallizes the *inner* aspirations, hopes, and fears of the human soul. These inner yearnings and questings override the bounds of reason and create ideal pictures of what they seek. The resultant idealizations of human life are the gods. God, therefore, is nothing but the picture of an ideal human being to whom we attribute all the qualities that we value, such as personality, love, sympathy, willingness to share our sufferings, and the like. But there is no objective reality in the external world corresponding to the picture. God exists only in so far as we succeed in realizing our ideals. Immortality, too, is a myth, not a fact. Bauer (1809-1882) was even more definitely "atheistic" than Feuerbach. He attacked Strauss's theory that the Gospels are unconscious poetry and mythology, and maintained that they were deliberately invented.

Hegelianism and Christianity. These views were vigorously combated by the Hegelian Right and Center parties, who upheld the compatibility of the Hegelian philosophy with religion and with the objective truth of Christian dogma. The conflict, not unnaturally, soon involved and turned upon interpretations of Hegel's metaphysics, particularly in so far as it had to do with the nature of *substance*. Heretofore, it had been assumed somewhat uncritically that he had regarded substance as subjective and conscious in character, and had looked upon the Absolute as a quasi-personal, spiritual being. In that

case, the existence of a personal God could be defended on Hegelian grounds. Now, this interpretation and this compatibility with Christianity were challenged by the Leftist, anti-religious wing of the school.

Again, the question came up whether substantiality was regarded by Hegel as essential or accidental to a thinking subject. If essential, he could be invoked as a champion of personal freedom and immortality. If only accidental, the ground was knocked from beneath the feet of his Christian, religious disciples. Once more the Right and the Left divided.

Finally, the point was raised whether the Hegelian Absolute could without any self-contradiction manifest itself in a single human subject. Upon the way this point was settled hung the congruity of the Incarnation and the divinity of Christ with the Hegelian teaching. The Right wing maintained that these dogmas were confirmed, the Left that they were completely discredited, by Hegel's teaching.

The attacks of the Left upon Christian doctrine soon inspired doubts with regard to the place and value of Christianity even as a social institution. Rothe maintained that ecclesiastical organization could no longer express and embody the Christian life. The state alone could do that. In an ideal state religion would not be a thing apart, with a special, ecclesiastical setting, but would be absorbed into society and pervade a man's entire social and political life. In short, the Church is not a unique institution with a validity and an authority all its own. It is merely a symbol and focus of activities and ideals which suffuse and actuate all human existence.

Political and Social Reverberations of Hegelianism. The anti-Hegelians welcomed Rothe with open arms. Here was proof positive that Hegelianism led inevitably to a pagan deification of the state. But the state itself was soon to be brought under the fire of the Hegelian Left. The *Hallische Jahrbücher*, originally a conservative theological journal, edited by the Hegelian Right, and highly Prussian and aristocratic in its politics, began to develop Leftist symptoms. First it gave way theologically by publishing an essay of Strauss's, and accepting one from Feuerbach, which the censor suppressed. Then it changed its political front and started veiled attacks upon the Prussian bureaucracy. As its fever ran higher, it turned to extolling the French Revolution, the Rights of Man, the *Contrat Social*, and industrial democracy. Soon it was demanding freedom of the press and praising political democracy and radicalism. In 1843 its publication was prohibited by the Prussian Government. But the radical spirit was not to be downed. Sturmer and Daumer agitated for individualism and anarchy.

Daumer, however, the author of violent anti-Christian diatribes, turned Catholic in the end.

Meantime, these social and political views were, as we might expect, vigorously resisted by the Hegelian Right and Center. They were also severely criticized by Karl Marx (1818-1883), the co-author with Frederick Engels of the famous *Communist Manifesto*, published in 1847.

II. DIALECTICAL MATERIALISM

Perhaps the most important development of the Hegelian Left was and is the theory known as *Dialectical Materialism*. This hypothesis was initiated by Karl Marx, and was promulgated by him in collaboration with Engels. Later it was reiterated by Lenin, who was a disciple of Marx, but who re-read Hegel on his own account, and whose annotated copy of Hegel's *Logic* is an interesting and valuable document for an understanding of the social and political fruition of the movement in Russia.

Karl Marx. Karl Marx (1818-1883) grew up under the influence of the conditions that produced the liberal movement in Germany and the revolution there of 1848, and was one of the most radical and strenuous partisans of the "Young German" party and its "advanced" ideals of social reforms. His entire life was spent in bitter opposition to the established order of his day, which he never ceased to attack with his pen and which he felt must be overthrown, if necessary, by the sword. The established order retaliated by doing its best to suppress him—so that, like Rousseau, a century earlier, he was in constant hot water.

He began his career by studying law in the university of Trier, his native city, but his interest soon shifted to philosophy, and particularly to the system of Hegel of which he became an enthusiastic advocate. Almost immediately, however, he came to feel that the "orthodox" interpretation of Hegel consecrated the political, social, and religious *status quo*, of which he was already a critic, and consequently he was soon to the fore in the group of "Young Hegelians" who were establishing the Hegelian Left, and either developing a naturalistic, materialistic and anti-theistic interpretation of the Hegelian philosophy or, at least, using it to undermine orthodox Christian doctrine. However, he was unable to agree with many of the conclusions of the other "Young Hegelians," as we shall see in a moment, which he considered either too temporizing and conciliatory, or too mechanistic and destructive of human liberty and opportunity for human progress.

Marx's Agreement with Hegel. Marx accepted wholeheartedly the Hegelian teaching that Reality is essentially a *process*, that this process is intelligible and congenial to the human mind, and that it moves with a "logic" of its own, according to the "dialectical" law of *thesis*, *antithesis*, and *synthesis*. He was also struck by the part that the Kantian and Hegelian category of *reciprocity* plays in the world-process. Causes produce effects, and wholes are built up out of parts, but effects *react* upon their causes, and wholes *react* upon their constituents, in such wise as to modify and partially determine their character. Any given set of conditions is, then, what it is, not only by reason of the antecedent conditions from which it has sprung, but also by reason of the resulting conditions to which it has given rise. Both Kant and Hegel had found this category best exemplified by organic and social phenomena, in the interdependence and interdetermination of the total structure and the component organs of a living body and in the reciprocal influence upon each other of the individual and the state. Applying this to the thesis-antithesis-synthesis triad, we find that theses and antitheses are both the cause and the effect of each other and that the synthesis is the new situation both created by, and, in the process of creation, creating their interplay.

Marx's Rejection of Hegel. But here Marx's agreement with Hegel came to an end. He rejected flatly the latter's view that these characteristics of the world-process indicated that it was the teleological unfolding of a design or Idea in the experience of an Absolute Mind or Spirit. The behavior of the world-process, he maintained, did not suggest guidance by a moral plan or purpose. Above all, its material and physical aspects could not be reduced to conscious content and regarded as mental in their essential character. On the contrary, they could only be explained on the supposition that matter in motion, extended in space and time, and existing in and by itself, independent of any mental awareness of or reflection upon it, underlay the phenomenal world.

Furthermore, the material substratum, being independent of mind, was in no wise due to it. Not only was it not mental content, it was not created by mind. On the contrary, there was every indication that mind was the product of matter in motion, that its appearance was dependent on certain physical conditions, and that its occurrence was purely incidental to the operations of physical nature.

Such being the case, the Hegelian insistence that the laws of being are an expression of the laws of thought, and can be discovered by analysis of the process of thinking, is founded on a false assumption.

Human thinking is rather an adaptation of the human mind to the movement of the universe of which it is a part, and its logical character is a reflection of the dialectical nature of that movement. But the "logic" of events is only discoverable by an observation of and meditation upon the operations of external nature and the course of human history as a whole—not by an analysis of individual consciousness.

Marx's Rejection of Idealism and Positivism. These considerations not only led Marx to reject all the idealistic interpretations of the universe, monistic and pluralistic, that had been proposed up to his time. They also made him critical of the contemporary "empirical" and "positivistic" attempts, which we shall take up in the next chapters, to reduce the Real to terms of phenomena alone, and to turn the nature and behavior of their supposed substratum into no more than a set of convenient descriptions and condensations of the flow of experience itself. And it impelled him to discard as superstitious and false all belief in the existence of supernatural, immaterial, and theological entities. The same negative attitude toward all non-materialistic interpretations of the appearance and behavior of the world-process has persisted as one of the cardinal points of *dialectical materialism*.

Marx had two more major objections to make to the Hegelian system. In the first place he felt that Hegel had made the world-process a closed circle in which the triad of thesis, antithesis and synthesis had already been completely accomplished and displayed. To cap the climax, Hegel had identified the final synthesis in all departments of life with the existing conditions of his own day, and had made them the ultimate expression of the Absolute Idea.

This struck Marx as nonsensical. The world-process is, to be sure, circular in that it moves continually through a repeated round of theses, antitheses, and syntheses. But it is not therefore a *closed* process—not to speak of human history having been closed by Hegel and his times. On the contrary, it is an *open* process. Its circular movement—and upon this Marx laid great stress—is *spiral*. It becomes *different*, as it goes on, though its new and different phases always exhibit its essentially dialectical character. So, too, humanity and human institutions continually *evolve*, as they dialectically revolve, and no stage or state can be regarded as conclusive or sacrosanct.

This belief in the *open* character of the world-process and of human history also made Marx critical of all materialism that was completely mechanistic and deterministic in its implications, and of all attempts to bolster up existing institutions—like Christianity or Hegelian ideal-

ism, for example—by reinterpreting them. All such points of view kept, or tried to keep, the cosmic and the historic circle closed, and therefore put a stop to *progress*. In a deterministic and mechanical universe there could be no real *reciprocity*. Man would be merely an effect of a cosmic and historic process upon which he himself could produce no effect and whose course he could not alter. He would be the slave of natural forces and of his own past, and could do nothing but accept his fate.

Nature of Dialectical Materialism. But, Marx maintained, once the human mind has been produced by nature, it becomes an active and causal factor in nature, and a co-determinant, to say the least, with natural forces in molding human destiny. It is able to alter the world-process to some degree, to modify its surroundings, and therefore to *improve* the human situation in the world. Man, then, is not the slave but the master of his fate. And the whole value and function of knowledge, scientific and philosophic, lies in making man recognize and exert that mastery, and in showing him how to change both his environment and himself for the better. Mere contemplation and understanding of the universe as it is get us nowhere. It is an emasculation of the mind's *essential* power to *act* and to *create*. The all-important thing is the *application* of knowledge. Any philosophy worthy of its name is a *practice*, a way of life. All science that is of any value is *applied* science. Theory and practice cannot be separated. They are to all useful intents and purposes one and the same thing.

Dialectical materialism, and sciences inspired and guided by it, are *active*, *creative*, and *applied* knowledge. Their grasp of the dialectical movement of the world-process and of human history enables them to *predict* what in the logic of events should occur, and therefore the course that man, in so far as he is intelligent, rational, and logical, should and, since he is a free active and creative factor in bringing things to pass, can follow. They naturally and inevitably put themselves into effect.

But to do so, dialectical philosophy and science require a *collective* united knowledge and effort on the part of all mankind as a whole. They cannot be applied by the individual as such, but only by society pulling together as one man. Hegel, and here we come to the last of Marx's principal objections to the Hegelian system, had unduly exalted the individual at the expense of society. He had made society a *means* to the self-expression of the individual, which he regarded as the ultimate and complete expression in human terms of the Absolute Idea.

The Individual and Society. This, however, in Marx's opinion, is

to invert the true relation of the one to the other. The individual is not an end-in-himself, but a means to the self-realization of society of which he is an integral part. He and his fellows, like the cells of a living body, stand in a relation of *reciprocity* to one another and to the community—all for one, one for all. Each may be the center of a separate life and activity, but each depends upon the others and upon the community for his existence and the performance of his special functions, and constitutes with them and it a single indivisible whole in whose maintenance and welfare his particular career finds its true self-expression, and his proper happiness is attained. Society, then, not the individual, is the real human unit. Hence, human thinking has got to be *collective*, human action *concerted*, and human resources *pooled*, if the common good of *all* human beings is to be attained. Otherwise we shall have in the future, as in the past and the present, dispersed and disunited individuals obtaining each a particular and isolated good, unshared with his fellows and only too often obtained at their expense.

What, then, does human history reveal in retrospect and in prospect, when viewed through the eyes of *dialectical materialism*? Looking backward we see that humanity hitherto has been at ceaseless war with itself. It has exhibited great differences and inequalities of individual opportunity, education, and possessions, which have given rise to *class* divisions and distinctions of various sorts. By and large, human society has been split into two opposing factions, the "haves" and the "have nots," the upper and the under dogs—a distinction whose bases have been largely artificial and fortuitous.

Economic Basis of Society. The most fundamental aspect of this cleavage is the economic aspect, since at the economic level we are dealing with the very bases and necessities of human life and survival, and with the minimum conditions of human progress and happiness. At the root of the economic situation lies the institution of *private property*, upon the possession of which the opportunity for individual self-realization has largely depended in the past, and by the possession of which the worth of the individual has hitherto been measured to a great extent. Human history, then, has been fundamentally a struggle for *wealth*, and wealth has tended to become more and more concentrated in the hands of the few to such a point that the many are left with a pittance barely sufficient to enable them to subsist, and often without that. Furthermore, the advantages that the possession of wealth bestows enable the few to dominate the many, to keep them in a condition of economic slavery, and to oppose successfully any at-

tempts the many may make to obtain a larger share of wealth and to better their condition.

Up to the present, humanity, at least as a whole, has not been really conscious of the existence, the nature, and the significance of the economic situation. It has not sufficiently grasped the fact and the character of the conflict, or been sufficiently acquainted with what it portends and its dialectically inevitable outcome. But now, with the shift from agriculture to industry and the substitution of machinery for handicraft, the class warfare has become so acute that human beings no longer suffer dumbly its consequences. They have become conscious of the fact that there exists a clear-cut and bitter opposition between a laboring class, or *proletariat*, which *produces* material wealth and prosperity, and a middle class or *bourgeoisie*—which has supplanted the old aristocracies—which amasses, monopolizes, and enjoys them in the form of what we now call *capital*. The class struggle is, then, basically a conflict between *capital* and *labor*.

Of the all-important *thesis* and *antithesis* presented by this conflict, Hegel, who took little interest in economics, had, in Marx's opinion, taken almost no account. On the contrary he had *aufgehoben* and synthesized such political, social, and cultural oppositions as he had observed in human history in a so-called democracy dominated by a well-to-do middle class in control of capital, and therefore in a position to exploit the worker. And this synthesis he had invested with an air of grandiose finality.

The Abolition of Private Property. But in so doing he had reached only a partial and temporary synthesis which turns out to be no more than a *thesis* to which an *antithesis* has been slowly but surely developing since the dawn of human history. In any event, if the world-process and human history are spiral rather than circular, we should expect this to be the case. The dialectical method indicates that this *antithesis* must come to a head and enter into the final phases of its conflict with the *thesis*, in which the balance of power will pass to it. Hence logically we may expect the dictation of the *capitalistic bourgeoisie* to give way to a dictation of the *proletariat*, and the capital wealth amassed by mankind to pass from the hands of the few to the hands of the many, or in other words from the hands of the capitalists to those of the laboring class which has produced it. But this can only be accomplished if *private* property is abolished, and all property becomes *public* by being transferred from the possession and control of the individual to the possession and control of the community.

World-Revo'ution. Such is the course of events logically indicated by the dialectical process. But to put it into effect requires human *effort*. Man must cooperate actively with the dialectic of the world-process and of human history, in which he is an active force and to the development of which he is able to contribute. But human nature being what it is, we cannot hope that the *antithesis* will come to pass by peaceful means. The capitalistic bourgeoisie cannot be *reasoned* into handing over to labor or to the community the wealth for which it has been so greedy and on which it has so tight a hold. The proletariat will not come to the top unless it puts itself on top. It must then be prepared to take active, energetic, practical steps to overthrow the capitalistic bourgeoisie, to destroy the institution and distribute the substance of private property, and to put the sources of wealth, the means of creating and distributing it, and its ultimate benefits into the hands of those whose toil produces it.

In short, the proletariat throughout the world will have to *revolt*, actively and forcefully, against existing conditions, and must be willing to shed its and capitalistic blood, if necessary, to attain its ends. And it is the business of dialectical materialists to arouse the proletariat to a sense of its plight and its power, to instill it with dissatisfaction with its present lot, and to encourage, foment, and further by all possible means, throughout the whole world, a world-revolution.

The Classless Society. But the triumph of the world-revolution is only a means to a further end. It is only a successful assertion of the *antithesis* against the *thesis*. It is primarily a work of *destruction*. But its out-and-out battle with and triumph over the *thesis*—the capitalistic bourgeoisie—will be at the same time a work of *construction*. For it will be guided by the ideal of a new *synthesis*, and will make of that ideal a fact. This synthesis will take the form of a "classless society," in which there will be no class distinctions and no class warfare, no bourgeoisie and no proletariat, no rich and no poor.

In it individual interests will be reconciled, and all the inequalities of opportunity, wealth and education, and all the resultant envies and hatreds that have hitherto divided mankind itself, will be *aufgehoben* and overcome. Public interest will absorb and transfigure private interests. *Esprit de corps* will "take up" and transubstantiate individual ambition and initiative and become the mainspring of human activity. Nationalism will become internationalism, and human allegiance will be to humanity as a whole throughout the entire world. All men will be comrades; laboring shoulder to shoulder, not each for his own self-aggrandizement, but all for the good of the great community of all

mankind, and all will take joy in so doing. All will voluntarily pool the results of their labors for the common benefit. All will share in the enjoyment of the wealth acquired together and held in common, to such degree as the value of their respective services suggests. And the higher cultural values, which hitherto the masses have been too poor or too uneducated to enjoy, will now through community support and the diffusion of education be put within the reach of all alike. The emergence of this *synthesis* from the conflict between *thesis* and *antithesis* by which humanity is at present torn, may be a long and painful process, fraught with privation, suffering, destruction, and the shedding of blood, but it is the logical outcome of the present situation of mankind.

Marx's View of Religion. We may remember the commotion caused by the attack of the Hegelian Left on Christian theology. Marx shared the sentiments that inspired it, but he felt that it was too temporizing, conciliatory and weak. As he saw it, Christianity had to be extirpated root and branch, not only because *dialectical materialism* denied the existence of anything but matter in motion and its products, and was therefore opposed to *all* supernaturalistic systems, religious and philosophical, but also because Christianity, and for that matter all religions, had not only tolerated but sanctioned the existing social and economic organization of society, which was about to be overthrown.

Christianity had become the religious expression of the spirit of the *bourgeoisie*. It had approved the institution of private property, which was the root of all evil. It had connived at the concentration of wealth and power in the hands of the few, and at the exploitation of the many. Indeed, it had fostered the belief that the acquisition of private wealth by an individual was a sign of divine favor and a reward for meritorious conduct. Nay more, it proclaimed that things as they were, were as its god willed them to be, and that the oppressions and injustices, miseries and sufferings with which human society was infected were part of his divine plan, and therefore really just and really good.

Christianity, then, had to be overthrown, and its god destroyed for moral as well as metaphysical reasons. The capitalistic organization could not be conclusively and convincingly done away with, unless at the same time the philosophical, theological, and ethical sanctions it invoked in its defense were also disproved and discarded. Hence the world-revolution must be anti-theistic in general and anti-Christian in particular.

Such in outline was the cosmic and social philosophy underlying the views set forth by Marx, in collaboration with Engels, in the *Com-*

munist Manifesto, and later by Marx alone in *Das Kapital*. This philosophy, restated and reaffirmed by Lenin, became the guiding ideal of the recent social and economic revolution in Russia.

III. FRENCH PHILOSOPHY

Maine de Biran and Royer-Collard. Such metaphysical speculation as France produced during this period was not original, but was rather eclectic and reminiscent of the views of earlier thinkers. For example, Maine de Biran (1766-1824) avowed himself at first a disciple of Locke and Condillac, and, following them in their introspective, psychological method, finally worked out a point of view of his own. He now denied Condillac's doctrine of the passivity of consciousness, and substituted for it a philosophy of the self as an active, developing entity, rising through the stages of sensation and perception to a condition of reflective knowledge. To these he later added an activity of pure spirit which transcends the mental operations characteristic of human beings and brings the mind into direct contact with God and the supersensible world.

Along with Maine de Biran we may also mention Royer-Collard (1763-1845), who, inspired by Cartesianism, attacked Condillac and the sensationalists, and regarded consciousness as the activity of a spiritual substance. Again in Jouffroy (1796-1842) we find a similar emphasis upon the spiritual nature of the soul and a theistic conception of the universe.

Cousin. But perhaps the most prominent of the representatives of this way of thinking, and after Comte, the best known of the French philosophers of the period is Victor Cousin (1792-1867). Cousin bases his system on a complete and exact analysis of consciousness from which in his opinion nothing is omitted and in which nothing is slurred over. Such an analysis reveals that the development of the individual consciousness is paralleled by the development of the race, and that this evolution, as Hegel pointed out, has three stages. In the individual consciousness we may distinguish sensation, volition, and reason. To our sensations we assign an *external ground*. The will, which is spontaneous, self-sustaining, free, and prior to reflection and deliberation, is the essence of the *self*. Reason is an *impersonal* activity, like the active reason of Aristotle, union with which in the vision of truth raises the individual out of himself and makes him one with all other selves, all truth, and all reality.

By reason, then, we are lifted out of the domain of psychology into

that of metaphysics. The two great concepts dominating rational thought—causality and substance—apply to an external world as well as ourselves. We now distinguish subject from object, the self from nature, and at the same time explain their existence and their relations, by referring them to a First Cause, God. The universe of minds and bodies is the result of God's absolutely undetermined, free and spontaneous act. Nothing in his nature necessitated his creating at all or creating the kind of world he does.

Applying these conclusions to history, we find the various stages and movements of consciousness mirrored in the external world. Humanity is first spontaneous and unreflective, preoccupied with and sunk in the external environment, and conscious only of the infinite of which it is a part. Then it becomes reflective, self-conscious, and individualistic, opposes itself to nature and occupies itself with its own finite character and destiny. Finally, it realizes and relates both the finite and the infinite. The East is devoted to the infinite, Greece to the finite, modern Europe to the union of the two: Government passes from the despotism of Asia through the individualistic democracy of Greece to the constitutional systems of modern Europe. Theology evolves from eastern pantheism into Greek polytheism, and from polytheism into Christian theism. Philosophy, differentiating itself into a number of individual distinct systems, each one of which is in partial possession of the truth, would find the whole truth in a reunion and fusion of all these opposing views into one.

All this sounds Hegelian. But Cousin was highly critical of German idealism. He disagreed with Kant's position that the nature of Reality is unknowable, and with Schelling's view that it is apprehended, not by reason, but by a kind of mystical intuition. Nor could he stomach the Absolute Idea of Hegel, or Hegel's principle of the identity of opposites, or his flouting of the law of self-contradiction, or the Hegelian application of the triad of thesis, antithesis, and synthesis to the world-process.

IV. ITALIAN PHILOSOPHY

Rosmini. Before leaving Latin soil, we ought to make a brief trip into Italy and brief mention of Rosmini (1797-1855) and Giöberti (1801-1852). Both were priests, and therefore their speculations were necessarily restricted. As it was, some portions of Rosmini's work were formally condemned. Both, again, were aroused by contemporary developments in France and Germany. Rosmini endeavored to restore

an objective criterion of truth. The concept of existence he found to be not only universal and fundamental to all thinking, but also objective in its implications. It is more than an idea *in* the mind; it is an idea of something outside the mind. The existence of this something is not inferred but directly intuited. Truth and Reality, then, exist independent of being and thought.

Since the feeling of externality is trustworthy, we may also have confidence in the felt externality of our body and of the causes of our sensations. The externality of our body and of the grounds of our experience mean, moreover, that the self is different from the body and from its content of consciousness, and is, therefore, a *subject* opposed to an object. Being a subject, it must have an essence and attributes. If, now, we follow out the system of more and more general universals thus created, we arrive at last at the *summum genus*, or idea of *being*, in which all other ideas are contained—that is, at the universal and absolute truth about all things. This idea, however, is not built up out of other concepts in the process of knowledge. It is a presupposition of knowledge, and is therefore innate.

Gioberti. Rosmini was attacked by Gioberti, whose system is much more orthodox. Gioberti begins with the premise that God, whom he designates as *being*, creates out of nothing the universe, which he calls *existence*. From God comes all human knowledge, which is an implanted intuition of the truth, or, in other words, of God himself. Philosophy is reflection upon the nature of the truth thus intuited and revealed, and upon the relations of the created to the Creator. Morality and religion are a progressive expression of the truth by human life, and a redemption, so to speak, of *existence* by *being*, culminating in the Incarnation. Gioberti's violent attacks upon the Jesuits, however, led to an eventual condemnation of his philosophy.

V. CONTEMPORARY SCIENCE

Astronomy, the Physical Sciences and Mathematics. Excepting for the imposing development of philosophy in Germany, the first half of the nineteenth century is more marked by scientific than by metaphysical progress. In France mathematicians had been busy working out the possibilities of the calculus and of analytic geometry, and one of the results of the Revolution was the founding of the great engineering and technological school in Paris, known as the *École Polytechnique*. In astronomy the Newtonian celestial mechanics had been confirmed and elaborated by Laplace. The law of gravitation, it was

felt, might prove universally applicable to even the minutest particles of matter. Chemistry, crystallography, and the theory of probability had made rapid advances. Sadi Carnot was laying the foundation of thermodynamics. And natural history had been raised to a new level by Cuvier, who shares with Laplace the honor of being the greatest French scientist of the early nineteenth century.

We may also permit ourselves to make a brief excursion across the Channel, while we are dealing with science. In Great Britain we find at the period, Herschel the astronomer, and the physicists and chemists, Priestley, Davy, Young, Dalton, Faraday, and Bell. In 1836 the British Association was founded. The Scotch universities were infected with the contagion of the Continental scientific spirit, though for the moment Oxford and Cambridge remained immune.

Again, if we cast a glance across the Rhine into Germany, we shall find there, also, great scientific contributions and advances contemporaneous with the speculations of the German idealists. Gauss and Jacobi were adding to mathematical knowledge. Liebig was occupying himself with organic chemistry. Humboldt was a great name in medicine and in the physical sciences. Von Bunsen was beginning his researches and inventions.

All this scientific ferment was also being crystallized and precipitated in great scientific generalizations and concepts. As we have already remarked, the Newtonian law of gravitation was being extended. The atomic theory of matter was reasserting itself. The mechanical hypothesis was coming into vogue once more. The kinetic theory of nature was in process of construction. The undulatory hypothesis of the character of radiant energy, suggested by Leonardo da Vinci, was being vindicated by Young and Fresnel. The concept of the ether was proposed. Thomson was working in thermodynamics along the lines suggested by Carnot. The notion of energy was being applied outside the field of thermodynamics to electrical, magnetic, and chemical phenomena.

Geology and Biology. Similar advances were taking place in the geological and biological sciences. Analogies between inorganic and organic matter and between plants and animals were in process of discovery. The cell was established as the morphological unit of life. The belief in recurrent, periodic cycles and overturns or catastrophes in the life of the universe was giving way to the theory of continuous geological and biological development. The science of embryology had been developed, and had revealed the "recapitulation" by the individual foetus of the characteristics of the embryos of lower forms of

life—an observation which was later of great importance in helping confirm the Darwinian theory. Lamarck was suspecting that the structure of the organism might undergo important modifications caused by the environment. Chambers had said outright that the concept of development might be applied not only to the origin of the solar system and the earth but to the generation of animals, and even of man himself.

Such questions and considerations could not but arouse discussion as to whether there is really any essential difference between organic and inorganic matter. A controversy raged between the mechanists and the vitalists over this point—the one maintaining, the other denying, that life can be reduced to terms of chemical reaction and that the living cell is nothing but a highly complex chemical molecule. Finally, in 1859, Darwin published his *Origin of Species*, which administered as great a shock to thought as did Galileo and Copernicus by their destruction of the Ptolemaic, geocentric astronomy. But of this more anon.

Psychology and Economics. Consciousness and its relation to the bodily processes were also brought under scientific scrutiny, and psychology, as we noted in discussing Herbart, began to set itself up as a science, backed, to be sure, for the moment by metaphysics, but in a fair way soon to detach itself from philosophy. The responsiveness of the nerves to electrical stimulation was discovered. The difference between motor and sensory nerves was recognized. The mechanics of sight and hearing were studied by Helmholtz. Herbart applied, as we have seen, mathematics to conscious behavior and thought he could describe it in exact formulae, analogous, for example, to the law of gravitation. In 1846 Weber (1795-1878) added his famous “law” governing the increase in stimulation necessary to produce an increase in sensation. Lotze was also attempting to bring all psychophysical phenomena within the bounds of a strictly mechanical theory.

Since the end of the eighteenth century economics, also, had been becoming more and more of a science. The French “physiocrats,” Quesnay, Gournay, and Cortillon, and the British thinkers, Adam Smith, Ricardo, and Malthus, had attempted to establish exact “laws” governing economic activity, and their efforts were being supplemented and carried on by John Stuart Mill, to whom we shall return in a moment, and by others. In short, modern *economic theory*, like modern physics and chemistry, was in process of construction, and was destined to undergo much the same vicissitudes, overturns, and reconstructions as were to occur in the history of the other sciences.

It was to be expected that the sudden acceleration of scientific theory and progress, the enthusiasm it engendered for the scientific method, and the faith it inspired in the power of scientific investigation to yield truth should have a profound effect upon philosophy and express themselves in new philosophic points of view. In France it inspired the Positivism of Comte.

Chapter XXI

COMTE AND POSITIVISM

I. LIFE

Auguste Comte was born in 1797. His family was fervently royalist and Catholic, but by the time he was thirteen he had become both a religious and a political free thinker. He entered the *École Polytechnique*, and began also to read philosophy, particularly Hume and Adam Smith. He also studied with Lamarck and Cuvier, and was well abreast of all the scientific discoveries and movements of the day. In 1818 he fell in with Saint-Simon, the most prominent French socialist of the epoch, and became his ardent disciple. Overwork brought on a mental breakdown in 1826. Recovering from it, he became a teacher of mathematics at the *Polytechnique* and spent his spare moments in elaborating and publishing his philosophy, the first volume of which appeared in 1830. Twelve years later, the sixth and last volume of the *Positive Philosophy* fell from the press. Immediately he embarked upon another book—the *System of Positive Polity*, the four volumes of which were published between 1851 and 1854. Meantime, his early religious upbringing was reasserting itself, not however by restoring him to the bosom of Mother Church, but by inspiring him with a cult of humanity in which the great philosophers and scientists took the place of the Christian saints, and an organized devotion to the cause of humanity was substituted for the worship of God. Disciples gathered about him and formed a sort of church, whose tenets were set forth in the *Positivist Calendar* published in 1849. In 1857 he died.

II. SCIENCE AS RELIGION

Even his *positivistic philosophy* was, however, in a sense a scheme of salvation. Comte was alarmed at the mental anarchy of his time and by the general breakdown of the old standards. He felt that something must be done to remove moral confusion from the minds of his contemporaries, and that, if order was to be brought out of mental

and moral chaos, the restoration of some sort of unified and coherent belief was necessary. Since the principal source of moral and mental unrest was the conflict between science and religion and between reason and authority, it was about this point that measures of relief must be concentrated.

Three possible ways of dealing with it presented themselves. An attempt might be made to reconcile science and religion. Or the authority of religion and the Church might be re-asserted. Or science itself might be turned into a religion, and its concepts might be so developed and popularized as to take the place of theology. History, however, shows that the battle between scientific and theological concepts is never-ending, and that therefore a reconciliation of the two is impossible. The second course is out of the question. The world cannot go backward. Copernicus, Galileo, the Renaissance, the present scientific awakening, have occurred. They cannot be effaced. Their results are part of history, and the revolution they have accomplished cannot be undone.

The third course alone is practicable. We can at least go forward, even if we cannot go back. The scientific method must be extended, the scientific point of view must be developed, and life must be reorganized on a scientific basis. Thus only can the world be saved. If this can be done, if we can become as scientific in our estimation of moral and social phenomena as we are in our dealings with physical events, then we may succeed in formulating a new, positivistic philosophy of life by which human beliefs and attitudes will be inspired and moral stability will be regained. What we need, therefore, is a *science* of social behavior to which men may pin their faith.

III. THE THREE STAGES OF THOUGHT

The Law of Growth. To found such a science, Comte continues, we must first study the development and nature of the scientific point of view. When we do this, we find that it invariably passes through three stages, or, in other words, exemplifies a *law of growth*. It expresses itself first in a *theological* form, next in *metaphysical* speculation, and finally in a *positivistic*, truly scientific manner. Its first phase represents a necessary point of departure from which all intellectual activity must start. The second marks a period of transition. The third is the fixed and final goal of all thinking. Such is Comte's celebrated *law of the three stages*. It will be found to hold good for the evolution of intellectual activity, both in the individual and in the race.

In the initial, theological stage all phenomena are explained by supernatural, arbitrary causes. The child finds reasons for the behavior of things by imagining them to be actuated by invisible beings similar to himself. In the same way, the race in its infancy explains its universe as the work of gods whom it creates in its own image.

At the metaphysical level both the individual and the racial mind have dispensed with quasi-human and personal causes of things. But they still find the explanation of phenomena in causes conceived as existing beneath the surface of events and as possessed of a superior reality to the appearances *grounded* in and upon them. Even science invokes all sorts of hypothetical entities which are just as "metaphysical" as the things-in-themselves the philosopher finds behind the sensible universe.

Positivism. The final stage, that of *positivistic* thought, is reached by criticism of the other methods. It involves a rejection of all hypothetical construction of entities regarded as existing apart from and beneath the sensible universe. The mind, as it progresses, comes to consider all such explanations as mystical and imaginary. But the dismissal of these "metaphysical" philosophies and scientific concepts does not reduce scientific thinking to a mere empirical observation of sense-data. Science does not consist in merely amassing facts, nor is its advance simply an enlargement of the field of vision. Science also infers from the behavior of phenomena certain *laws* which their behavior exemplifies and follows. It is a process of generalization.

These *laws*, however, are not regarded by positivistic science as governing and determining the behavior of the sensible world. They are not the *causes* of things. As long as science considers them such it has not as yet risen above the metaphysical level. *Natural laws* are no more than descriptions of *how* phenomena do behave. They are not explanations of *why* they behave as they do. Why things behave as they do is something we cannot know. The causes of things are unascertainable. This is true, not only with respect to the why and wherefore of the universe in general, but with respect to each particular phenomenon occurring in sense-experience.

IV. THE POSITIVISTIC VIEW OF SCIENCE

The Practical Nature of Science. It follows that science on its final, positivistic level is not in any way concerned with discovering the causes of events. It merely infers from phenomena concepts of wider and wider application, and its goal would be attained if it could dis-

cover some all-inclusive concept, or law, to which every phenomenon could be subjected. In that case, Comte thinks, the practical end of science, which is found in the *power to predict future events*, would also be realized.

He realizes, however, that in assuming the uniformity of nature and the universal prevalence of certain habits of action throughout all space and time, he is himself indulging in one of those *metaphysical* hypotheses that he condemns. He hastens to modify the dogmatism of his assertion. Laws are not *necessarily* absolute in the sense of being of necessity *universally* true. The establishment of absolute laws, which we could be sure held for everything in all times and places, would require a *complete* scientific observation of all phenomena whatsoever, past, present, and future, throughout the entire universe. Obviously such completeness is impossible.

Furthermore, scientific thinking is relative to the nature of the human organism. Sense data are relative to the kind of sense organs we possess, and the inferences we draw from them are conditioned by the nature of human mental processes. Organisms differently constituted from ours might have a different phenomenal experience, different methods of reflection upon sense data, and therefore different forms of scientific generalization. All in all, then, Comte admits, scientific laws are at the best approximations.

Science as Ability to Predict. Nevertheless, within the limited spheres of space and time with which we are familiar we can regard these laws as sufficiently absolute for our type of organic set-up to give us practical certainty in dealing with the natural world immediately surrounding us. We have practical certainty, for instance, that the law of gravitation is absolute for our solar system. Therefore, we can compute and predict the behavior of bodies within that system with mathematical precision. If we cannot know absolutely whether it describes also the movements of other heavenly bodies, we have the consolation of knowing that their movements do not concern us. We know absolutely all that we need to know absolutely.

We are now in a position to see what science does and what it can do. It organizes knowledge. It gives us the power of prediction and enables us to control nature in many ways and to harness her in the service of human progress and happiness. Surely, then, it should also be able to give certain *ideals* to humanity and to afford mankind *moral* guidance and inspiration.

V. THE BACKWARDNESS OF THE SOCIAL SCIENCES

If science is to do this, however, the social sciences, which deal with human progress and self-realization, must become scientific in their outlook. That they will eventually adopt a scientific attitude and find inspiration in the vistas opened up by positivistic science is suggested by the historical fact that all the others have either attained or are fast attaining the positivistic level. Indeed, we may arrange the sciences in an order of precedence determined by their successive attainments of positivistic finality. Mathematics was the first science to rise from the theological, through the metaphysical, to the positivistic grade. The next to follow suit was astronomy. Then physics arrived, followed by chemistry. Biology is on the way. Why, then, should not ethics and sociology also win out in the end, in spite of the fact that they are now cluttered and hampered by theological and metaphysical concepts?

Incidentally, we may note, the other sciences have attained a positivistic outlook in the order of their complexity and dependence upon their fellows. Mathematics, the simplest and most fundamental of the sciences, arrived first. Naturally, then, the social sciences, which are the most complex and cap the scientific edifice, may be expected to lag behind and be the last to reach the final stage.

In developing the biological and social sciences, we have, however, to adopt a different method from that used by the sciences dealing with inorganic phenomena. In the inanimate world the parts are better known than the whole, and science progresses by building up general concepts and laws from an observation of particular events. The subject matter of biology and the social sciences is, on the contrary, better first observed *en masse* than in the individuals that constitute the whole. In these sciences we progress from the whole to its parts. For example, we can only understand the individual man in his social aspects by first studying the nature and constitution of society.

Furthermore, the time element enters into the study of sociology. Society has evolved. It has had a history. In the course of its development it has accumulated and handed on a heritage of experience. The past has influenced the present, and the present status of human society cannot be understood without reference to the past.

VI. SOCIAL STATICS AND DYNAMICS

Social science may be divided into *social statics*, which investigates the enabling conditions of the existence and permanence of social organization, and *social dynamics*, which concerns itself with the enabling conditions of change and progress. *Statics* shows us that social equilibrium is maintained by a conflict of opposing attitudes. Egoism and altruism, both of which are original impulses in human nature, offset each other and hold each other in check. Intellectual vivacity and curiosity are counterbalanced by mental laziness. Brakes are put on progress by the dislike of change. Liberalism and conservatism wrestle with each other, and by the tension of their struggle keep each other on their feet. These conflicting attitudes of mind, and the system of checks and balances they set up, are indispensable to the stability of the social structure. It takes all kinds of individuals to make an orderly world. Nevertheless, the goodness of a society is measured by the strength of the nobler motivations of altruism and intellectual keenness, curiosity, and freedom. If society is to progress, these attitudes must be in the ascendant.

If we now proceed from the universal to the particular, we find that the units of which society is composed are not individuals but families. Upon the importance and fundamental position of the family in the social organization Comte cannot too strongly insist. Without it the individual would not be human. It provides, then, the bricks, so to speak, out of which the edifice of *human* society must be constructed.

We have already a hint as to the conclusions to which *social dynamics* will bring us. Moral and social progress are measured in terms of the growing preponderance of our higher over our lower activities, and of the increasing control of the lower by the higher. The higher activities are rational in nature. Therefore, progress lies in the development of reason and science in our attitude towards life and in our method of dealing with the ethical and social problems it presents. Only thus can we be just and fair and truly moral in our relations with our fellow-men.

If we turn back to history, we shall find that moral progress is identical with intellectual progress. The three stages of the evolution of thought have corresponding political phases. Theological, personalistic types of explanation of natural phenomena go with a militaristic organization of society. The metaphysical stage is associated with societies that make much of abstract legal considerations. The positiv-

istic outlook is the natural attitude and support of the modern industrial age.

VII. THE WORSHIP OF HUMANITY

Voltaire said that if there were not a God it would be necessary to invent one. Comte having rejected God, along with theology and metaphysics, was forced to re-create an object to worship and to serve, acceptable to his Positivism. He felt a need of an external being whom man might adore and whose will he might do, and this supreme being, or *grand être*, he found in *humanity* as a whole. Mankind is the true God of the individual man, the "great being" whom he should seek to serve and whose perfection he should endeavor to ensure. We should love Humanity with all our mind and heart and strength and seek to do its commandments. We should love our neighbors as ourselves. Religion pure and undefiled is to express this love in honesty and justice towards our fellow-men, in honoring the family, and in infusing all the activities of society, economic, political and social, with morality.

This religion, like all others, demanded outward symbols and forms. It had to have its clergy. To provide them Comte adapted the sacraments and the ritual of the Catholic Church and instituted a priesthood. Chapels were acquired in which services were held. Comte seems even to have dreamt of a kind of theocracy. His clergy, chosen for their character, their intellectual attainments, and their knowledge of human nature and its problems, were to direct the life of the Positivist state. They were to oversee education, compose quarrels, and advise the rulers, as well as to perform their specifically priestly functions as ministers of the publicly established cult of the great being, Humanity.

Chapter XXII

BRITISH PHILOSOPHY 1800-1870

I. BENTHAM

Continental Influence on British Thought. We now cross the Channel to Great Britain. We find there a somewhat complex situation, due to the convergence of widely different strains of thought. Kant's influence was making itself felt. Samuel Taylor Coleridge (1772-1834), who had studied Kant and Jacobi and developed an enthusiasm for the post-Kantian idealists, was lauding German philosophy and at the same time attacking contemporary British thought, which still was largely shaped by Locke and Hume and their successors. Out of the psychological and epistemological theories of the earlier British School the so-called *associational psychology* was developing, which, following their lead, tried to build up memory and imagination and the more abstract processes of thinking out of sense perceptions associated according to certain invariable laws. Eighteenth century British ethics was contributing to the formulation of *Utilitarianism* in the sphere of morals. Finally, to these inherited British and imported German influences we must add French ones emanating from the Positivism of Comte.

Utilitarianism. The link between the British ethics of the last half of the eighteenth and the first half of the nineteenth century, is to be found in Jeremy Bentham (1748-1832) whose mature years straddle equally the two epochs. It is to him that we owe the coining of the term *utilitarianism* to designate a theory of morals that had a profound effect upon the ethical thought of the early nineteenth century and that still claims many adherents. To him, too, we owe the adoption from Priestley, or from Hutcheson, of the phrase "the greatest happiness of the greatest number," which he made famous as the watchword of the new movement. This, he tells us, describes the highest and ultimate moral good, at which all action, so far as it is considered ethical, must aim. The moral value of conduct, private and public, is to be measured in terms of its usefulness. And what is or is not useful will be determined, according as it does or does not contribute to the

greatest good of the greatest number of people. Both the individual and the state must ask whether any proposed course of action will or will not be conducive to the happiness of the majority, and must judge it to be morally good or evil by this standard.

Happiness, Bentham defined as pleasure, and maintained that pleasure and pain are the mainsprings of human action. We instinctively avoid the one and pursue the other. They are, therefore, the natural bases of our distinction between good and evil. Since we can only judge what we ought to do on the evidence of what we, constituted as we are, actually do tend to do, we *ought* to seek pleasure and to shun pain. Pleasure is the moral as well as the natural end of action, and *right* behavior is behavior calculated to increase the amount and distribution of pleasure in and among human beings.

Bentham, however, was not interested so much in the strictly ethical implications of his doctrine as in its economic and political bearings. In the idea of utility measured in terms of general welfare and happiness he found a useful basis for criticizing existent social institutions and for making suggestions with regard to their possible betterment. Utilitarianism, as a system of morals, is most closely associated with the name of John Stuart Mill, of whom we shall have occasion to treat in a moment.

II. JAMES MILL AND THOMAS BROWN

Attack on the "Ego." Closely linked with Bentham, and in a way philosophically, as well as biologically, the father of John Stuart Mill was James Mill (1773-1836). Like Bentham, with whose utilitarianism he agreed, he was more interested in economics than in ethics. But he was also a psychologist of eminence, and his *Analysis of the Phenomena of the Human Mind*, published in 1829, was a feather in the cap of the Associationists.

Kant, it will be remembered, had maintained that our acts of perception and knowledge are attended by a transcendental "I know"—a *knowing* that I know or that I perceive, which synthesizes all our experience into a unity of apperception. Stewart and Reid had also upheld the existence of an independent faculty. James Mill on the contrary maintains that no such transcendental "I know" can be isolated from judging and perceiving and set over against them. The *self-conscious* element pervades all consciousness. Knowing that we know or that we feel is not superimposed upon the act of knowledge or perception. It is involved in it. •A feeling is also a consciousness of that

feeling. All consciousness is self-consciousness. All awareness is also an awareness of being aware.

In this way Mill undermined the notion of an "ego" existing apart from and behind experience, which had played and was playing so important a role in the Kantian philosophy and in the systems of the post-Kantian idealists. The subject, the self, was given *in* experience, and was no more than a certain quality that experience felt in itself.

Brown. Another important contributor to the Associationist school was Thomas Brown (1778-1820). Brown, like Mill, denied a special faculty of consciousness expressed in a transcendental "I know" accompanying the stream of experience. The self is a derivative state of mind, built up by memory which annexes past states to present ones and thus bestows upon the flow of experience a sense of self-identity. This sense is, however, unanalyzable. The belief in our self-identity is an original intuition and law of human nature, from which we cannot get away.

The same, Brown thinks, holds true of causation, and herein he differs from Hume, whom he criticizes at some length. Causation, to be sure, is based upon an observation of the occurrence of antecedents and sequents. But the belief in causal connection is not built up by repeated observations of the same sequences. It is an original intuition. Repeated observations form rather the basis for our distinction between mere coincidence and real causal connection, and thus enable us to scrape off the superfluous and irrelevant elements that attach themselves to the essential linkage between cause and effect.

III. HAMILTON AND MANSEL

Hamilton's Philosophy of the Unconditioned. From James Mill, we should, genealogically speaking, pass immediately to his son John Stuart Mill. But the younger Mill was philosophically the son of many fathers, with some of whom, like Kant and Comte, we are already acquainted. One of them, however, remains to be mentioned—Sir William Hamilton (1788-1856), a Scotch lawyer and philosopher who was for the last twenty years of his life Professor of Logic and Metaphysics at Edinburgh University. Hamilton was greatly influenced by Reid, whose works he edited, and also by Kant. Indeed, his system is largely a mixture of their views. His reputation as a philosopher was established early in his career by an article "On the Philosophy of the Unconditioned," which appeared in *The Edinburgh Review* in 1820. After his death his university lectures on metaphysics and logic were

collected and published. He was a man of great and diverse learning, and had a keenly critical mind. He made valuable contributions to the Associationist psychology. But he added little original to the development of metaphysics.

Hamilton differs from both Kant and Reid, and agrees with James Mill and Brown in denying any transcendental basis or special faculty of consciousness to Kant's transcendental "I know." Consciousness of being conscious is not a separate act reflecting upon the activity of perceiving and knowing. All consciousness means not only awareness but a recognition of being aware. Consciousness is then essentially self-consciousness.

Consciousness a Conditioned Perception of Reality. But Hamilton agrees with Reid in holding that experience is immediately and directly of something external to itself. We do not perceive perceptions. Our perceptions are acts of perceiving an object outside and independent of the mind. We do not, then, have to argue and infer the existence of an external world. Nor is our sense-experience a subjective and second-hand representation of it. We are in direct contact with an external reality, and the sense of that contact is part and parcel of our perceptions, and is as immediately present and given as they are.

However, although we directly perceive an external world existing independently of our perceptions of it, we do not and cannot perceive it as it really is. Our sense organs and ways of thinking condition and distort its real nature. Nor can we know *ourselves* as we really are. We can only know ourselves as we appear to ourselves under the form of the internal sense, which presents us with a flow of experience in time. Here Hamilton is in agreement with Kant.

Still, although the content of experience is *phenomena* and not things-in-themselves, we cannot say that the sensible world is an illusion. On the contrary, we draw *within* the world of phenomena the line between the real and the illusory, waking and dreaming, sanity and madness. The phenomenal world is a real appearance of Reality to our minds, so far as they are able to apprehend it.

At this point we find Hamilton veering away once more from Kant. Kant had regarded the categories—substance, quality, causation, and the like—as *positive* forms impressed by our minds upon experience. Hamilton regards them rather as *weaknesses* of the mind, indicative of its inability to grasp the true nature of the Real. We must formulate experience as we do, because we are not strong or knowing enough to formulate it otherwise. The categories are not colored glasses. They are merely cloudy ones. •

The Nature of Reality Inconceivable. This dim-sightedness of the human mind subjects it to what Hamilton calls *The Law of the Conditioned*. The human mind is so constituted that it limits the existent by the laws of self-contradiction and excluded middle. Hence, being unable to conceive the Real as *both* unconditioned and conditioned, absolute and relative, infinite and finite, one and many in character, it must think of Reality as *either* the one *or* the other. But since a conditioned and an unconditioned Reality are equally self-contradictory and unthinkable, the mind must conceive the Real as *neither* the one *nor* the other—which is also self-contradictory and inconceivable.

The only possible conclusion, Hamilton feels, is that, though we can know that the Unconditioned exists, we cannot know or conceive its nature. However, the mind is not therefore doomed to complete skepticism. We do not need to call, like Kant, upon moral postulates for aid. The intellect itself has its postulates, though the Law of the Conditioned prevents its verifying them. For example, the mind quite independently of moral motivation *believes* that there is such a thing as an uncaused, free act. But it cannot conceive such an act, since its experience is conditioned, and is given as a temporal succession of events and objects in which no first, unprecedented event or thing is ever found. Therefore, believe as we may and must in freedom, we cannot help *conceiving* of everything as caused. Or take God. We cannot help believing on intellectual grounds that he, as the unconditioned Reality, exists. But how he exists, our minds, thinking only in terms of the conditioned, are unable to understand.

Valid Knowledge of the Conditioned Possible. Within experience and the realm of the conditioned we may have valid and authoritative knowledge. The steps by which such knowledge is built up Hamilton describes at length. Experience *presents* us with an external world spread out in space and a self continuing in time. Memory and imagination retain and recombine sense presentations. In their work they are governed by the *law of redintegration*, to which Hamilton endeavored to reduce all laws of association. According to this formula the different elements entering into a mental state tend, when they recur separately, to recall the others.

Images and memories provide the food for the relating, comparing, connecting, judging activities of thought, which extract from them general ideas and by comparison subsume data under these ideas. In his view of universals, Hamilton follows the nominalistic tradition. General ideas are based upon and refer to particulars. There is no such thing as mankind apart from individual men. Though innate

ideas do not exist, the mind follows certain *a priori* rules in thinking which supply what Hamilton calls the principles of *common sense*.

We may express these rules as follows: In our reasoning we do not feel that we have got down to bed-rock and reached *fundamental* rather than *derivative* notions, until we have analyzed everything that is complex into simple elements, and have reached that which seems necessary, universal, and incapable of further explanation. In endeavoring to reach rock-bottom we shall find our instinctive and safest guide in the Aristotelian dictum that the test of truth and existence lies in what appears true to all. That which is universally apparent is the *evident*, and sound evidence can be gathered, and reasonable certainties can be attained, only by obeying the rule of evidence, as Aristotle has expressed it.

Mansel's Theory of "Negative Knowledge" of the Unconditioned. Hamilton's disciple, Henry Mansel (1820-1871), Professor at Oxford and Dean of St. Paul's, endeavored to escape in another way the complete skepticism *The Law of the Conditioned* seemed to imply. While agreeing with Hamilton that *positive*, objective knowledge can be had only of the finite and the conditioned, he maintained that we may have what he called "negative knowledge" of what lies beyond experience. This "negative knowledge" is based upon the extension to the Unconditioned of such definite, determinate and relative qualities of the conditioned as one pleases, and then declining to limit or "condition" the attributed qualities by defining them in their ordinary human sense.

For instance, we may attribute to God *infinite* and *unconditioned* power, knowledge, benevolence, justice, mercy and the like, although we cannot possibly *know* what these qualities are like when removed from their conditioned context and human significance and given *unconditioned* status. God's power is still power, although not what we mean by power. He is righteous, but not what we mean by righteous. He is moral, but we cannot judge him by our moral standards—since *unconditioned* power and moral qualities escape our definitions of the terms.

IV. JOHN STUART MILL

Life, Works, and General Attitude. Like his father and Bentham, John Stuart Mill (1806-1873), to whom we now turn, was deeply interested in economic, political and social problems, and discussed them at length in his writings. His "classic" *Principles of Political Economy* appeared in 1848, his no less "classic" *Essay on Liberty* in 1850, his

Thoughts on Parliamentary Reform and his *Views on Representative Government* in 1859 and 1860 respectively. A year later he was discussing *The Subjection of Women*. To the next decade belong his more important philosophical works, with the exception of his *Logic* which appeared in 1843, and his *Essays on Religion*, which were published after his death. His *Utilitarianism*, *Examination of Sir William Hamilton's Philosophy*, *Comte and Positivism*, and the edition of his father's *Analysis of the Human Mind* were written between 1860 and 1870.

Metaphysical questions Mill was inclined to push to one side, partly because he was convinced that they were unanswerable, and partly, perhaps, because speculation did not appeal to him. He was in agreement with the skeptical contention that we cannot know what things-in-themselves are like. For that matter, we cannot even be sure that they exist. We have not the immediate perception of an external reality claimed by Hamilton and Reid. We are indeed haunted by the feeling that such a reality must exist as the ground and cause of our perceptions. But we have no means of testing its validity. For Mill, as for Kant, knowledge cannot be extended beyond experience.

Matter "A Permanent Possibility of Sensation." Why, then, do we *believe* that such a world exists? The belief is built up, he tells us, out of empirical experience by the aid of memory and the association of ideas. Our past experiences are recollected, and the laws of association lead us to expect them to recur in the context in which they were formerly perceived. There is no basis in our memory for any other expectation. Our belief is continually verified and strengthened by our daily experience, and comes to represent a *permanent possibility* of re-experiencing the same sensation. The possibility of such experience continues to exist in the absence of the experience itself. It assumes, therefore, an objective, external character, and becomes a kind of substance, of which the recurrent sensations, when they are again felt, figure as the manifestations and qualities. Indeed, what we mean by the *matter* or *substance*, which we suppose to *underlie* phenomena, is simply this *permanent possibility of sensation*.

The Self. Mill tries also to derive the consciousness of *self* from empirical experience. He was a thorough-going Associationist in psychology, and felt that the entire content of consciousness could be built up from sense perceptions by memory and imagination working in accordance with the laws of association. But here he ran into difficulties to which he himself confessed. Experience, as he viewed it, was a series of discrete impressions. Somehow, as these impressions flowed by, they precipitated a subjective belief in a permanent pos-

sibility of *having* more perceptions, just as on the objective side they precipitated the belief in the permanent possibility of their *recurring*. This belief, which accompanied the sequence of sense perceptions, became "materialized" as the idea of a soul-substance underlying the subjective aspect of experience.

Such an explanation, however, he regarded as by no means satisfactory. It involved the supposition that a succession of feelings could be aware of itself *as a whole*, and that therefore each moment in the series, although existing only in the present, could be conscious of past and future moments—a supposition that Mill admitted was very difficult to defend. Still, if it could not be defended, we were driven back upon the equally precarious assertion that the self was more than either actual or possible consciousness, and must be regarded as a spiritual substance. But spiritual substances were entities of which we had no experience whatsoever, and were quite impossible to conceive. We were, then, between the devil and the deep sea, forced to choose between two equally unsatisfactory hypotheses. We simply have to face them, admit them, and leave them as they are. All we can say is that in consciousness we just do have a series of feelings that does know itself as a whole inclusive of past, present, and future—how or why, we cannot tell.

Religious Views. Mill's metaphysical skepticism naturally made him noncommittal towards theological speculations. However, he regarded Hamilton's assertion that positive knowledge of God is absolutely impossible as altogether too dogmatic. There is no *a priori* impossibility, rooted in the limitations of the mind, of knowing what God is like—if he exists. The question of his existence and his nature is wholly a matter of evidence, to be treated and decided like any other hypothesis. Is there anything in experience that leads us to believe there is a God? If so, what does experience suggest with regard to his character?

The evidence of a God's existence, Mill seems to think, is certainly not conclusive one way or the other. We cannot prove or disprove it. Nor are the probabilities particularly *pro* or *con*. There is about as much to be said on the one side as on the other. It is largely a matter of opinion, about which men are free and certain to differ.

Certainly, however, there is no evidence whatsoever for a God who is both all-good and all-powerful. On the contrary, the evidence absolutely rules out such a being. The suffering and imperfection in the universe are sufficient proof that, if God is omnipotent, he cannot be benevolent, and that, if he is a moral being, his power must be limited.

No *good* God can possibly be conceived as deliberately creating out of a plenitude of power a universe like ours. Mansel's doctrine of "negative knowledge" was particularly obnoxious to Mill. If God was to be called good, just, merciful, and the like, we must, when we applied those terms to him, mean by them what we meant when we applied them to our fellow men. If God was a moral being, he must come up to our standards of morality. We could not call him benevolent and loving, and then, on the ground that he was divine, excuse in him behavior that no benevolent or loving human being would for a moment contemplate himself or tolerate in other men.

If we exclude all metaphysical and theological questions from consideration, what have we left? Everything, Mill thinks, that is of real value. Here he is in full accord with Comte and the Positivists. We have science and we have morality, we have all the bases of human organization and happiness, none of which depends upon metaphysics and theology. Knowledge and science, though they may not extend beyond experience, are valid within experience, and create out of it an orderly, stable, and trustworthy world, if they are developed along the right lines and according to the right methods.

Rejection of Aristotelian Logic. We are thus brought into contact with Mill's most important philosophic work—his theory of logic and of scientific method. Here once more empiricism and the Associationist psychology are paramount in determining his views. For the old, scholastic, Aristotelian logic, with its syllogisms and necessary deductions, Mill has little use. Correct and fruitful methods of reasoning are always *inductive*. They start from the data afforded by experience, and proceed to build up general rules and truths regarding them. But general truths have no content or application outside of the particular instances upon which they are based. Nothing can be *deduced* from them regarding particulars except what the particulars have already contributed to them. In a word, all so-called logical *deduction* by syllogistic methods is really *induction*.

Take any instance of deductive syllogistic reasoning you please. The conclusion is not *deduced* from the major premise, it is *presupposed* in it. The major premise is inductively inferred from an observation of many particular facts *plus* an assumption that other facts occurring in like circumstances will exhibit similar characteristics.

The Proximate Validity of Natural Law. But have we any right to assume that these other facts in which the characteristic has not yet occurred will eventually exhibit it? Can we be sure, for instance, that just because all the human beings of whom we know are mortal, all

those alive or yet to be born will also die? If we cannot be *certain*, then it is impossible to establish any general or universal truths, which are necessarily true in all places and at all times. The assertion of such truths is, at the best, the assertion of an hypothesis.

Mill is more than ready to admit this. All the so-called laws and uniformities of nature have only a proximate validity. They are true descriptions of natural events so far as we have observed them. But their unbroken persistence, while observed data accumulate, leads us to believe that all the operations of nature are uniform and regular, just as our observation of death in human beings leads us to infer that "all men are mortal." Again, just as we base all our dealings with our fellows upon the assumption that they are mortal, so we make of the uniformity of nature in general a principle of induction in general. *If* nature *is* uniform and regular in her behavior, we can infer the universality of her laws from our partial observations of her workings. *If* nature is *not* uniform and regular, the whole process of induction goes by the board, and we can infer nothing with any certainty, and have nothing that we can properly call knowledge. Experience hitherto and everywhere has supported the principle of uniformity, and has validated our faith in it by confirming the inferences and predictions we have made in accordance with it. We have been able to build up an exact and reliable body of scientific knowledge, which stands as yet uncontradicted by the course of events.

The Observed Uniformities of Nature. Proceeding now to investigate these uniformities, what do we find? We find space and time; we find the principles of mathematics, which, in Mill's opinion, are not *a priori* but derived from experience; we find the laws with which the physical sciences deal; and above all we find the law of causation, which is practically the law of uniformity itself. Causation rests upon an observation of invariable antecedents and consequents, *plus* an assumption that whenever the same antecedents occur they will have the same consequents.

We cannot, however, accept antecedents and consequents at their face value. Otherwise we might mistake what merely comes *after* for what occurs *because of*. It is the business of science to separate consequences from mere sequents by detecting the circumstances that *under all conditions* precede a given event and without which *under no condition* the event occurs. When we have discovered them, we have discovered the antecedents with which the event is *necessarily* connected. Indeed, we can mean by necessity no more than *unconditional* sequence.

The Laws of Experimental Induction. As a means of precipitating everything that is accidental and conditioned from a series of events and of leaving in it only what is necessary, unconditional, and truly causal, Mill advances his famous *laws of experimental induction*. First, we pick out such antecedents as are *common* to the events whose cause we are seeking. This is the *method of agreement*. We then precipitate from these antecedents those whose presence or absence makes any *difference*, so far as the absence or presence of the events is concerned. This is the *method of difference*.

Again, to exclude the possibility of the event's being connected with antecedents other than those already suggested by the method of agreement and difference, we may appeal to other experiences of similar situations to show that there is at any rate a *residue* in the event that *is not* habitually connected with antecedents other than those already indicated, and that *is* habitually connected with them. This is the *method of residues*. Finally we seek to determine whether a greater or lower degree or quantity of the event is proportionate to the degree or quantity of certain of its antecedents. This is the *method of concomitant variations*.

When an antecedent can pass all four of these tests, so far as its relation to a sequent is concerned, it is regarded as a *cause*, and the sequent in question is called its *effect*.

All the while, however, we are also using *deductive* reasoning. We are familiar with the sequences of events, and if we meet with certain occurrences we *deduce* that they are caused by such and such antecedents. But these deductions have always to be *verified* by experiment, and observation, and analysis.

We must, however, be on our guard against regarding causes as metaphysical entities. The cause of one phenomenon is nothing but another phenomenon, whose unconditional connection with it we have established by the rules we have just been discussing. To know the causes of things is not to penetrate beneath the phenomenal world. It is simply to apprehend what events in the phenomenal world always occur together.

Free-Will and Necessity. Mill's definition of necessity leaves, he feels, both the determinists and the advocates of free-will little real to fight over. Man, being a part of nature, is subject to her uniformities. His behavior proceeds according to the law of causation. His acts are determined by the interaction of his character and his environment. Knowing what a given individual is like, we can predict with reasonable certainty what he will do in given circumstances. All our dealings

with our fellows are based upon the assumption of human uniformities, just as our dealings with the physical world are based upon the "axiom" of the uniformity of nature as a whole.

There is then as much *necessity* in human behavior as there is in physical nature. But in neither case can we detect any *compulsion*. There is no such thing as a fate or destiny which forces us or nature to behave as we do. We, like nature, act in an orderly and predictable way. But the fact that we so behave does not deprive us of our feeling of liberty. *We* ourselves initiate our actions. *We* are the source of them, *we* are responsible for them. *We* play an active part in the molding and development of our own characters and careers. My desires and ideals direct my behavior and *cause* me to be what I am. I can do what I *want* to do with myself. What more could one ask in the way of freedom?

Utilitarian Ethics. But what are our desires and ideals? What do we want to do? In short what is the *good*? In answering these questions Mill displays himself as the foremost and the most systematic of all the champions of Utilitarianism. Like his father and like Bentham, he finds the moral good in the greatest happiness of the greatest number, and defines happiness in terms of pleasure. But he also departs in some ways from their teachings. Bentham, for example, in the "hedonistic calculus" he tried to construct for computing the relative value of a pleasure, had not taken account of the *quality* of the pleasure under consideration. He had simply judged it in relation to its intensity, presence, duration and the like. Mill, however, insisted that some pleasures are preferable simply because they are *higher*. Intellectual pleasures, for instance, are *intrinsically* better than sensual pleasures. No intelligent man would sacrifice his intelligence, even if he were assured that if he were more stupid he would be more contented.

Again, whereas Bentham sought to reduce our altruistic feelings to self-interest, Mill recognizes the primitive character of social impulses and founds the social character of the good—the greatest happiness of the greatest number of people—on the gregarious instinct. We are naturally altruistic and self-sacrificing. We naturally find our individual happiness indirectly by directly promoting the happiness of the group.

The Dangers of Altruism. At the same time, Mill felt that unselfishness can be carried too far. The individual is himself a member of the group whose greatest and most widespread good he is supposed to be promoting, and is himself a repository of the happiness of the

greatest number. He must, therefore, always reckon himself as an end as well as a means, and must weigh, in an absolutely scientific and rational manner, the contribution made by his own happiness to the greatest good of the majority against that made by the happiness of others. He will yield to others when by yielding he adds to the sum of human happiness. He will demand that others yield to him when getting what he wants is in his judgment more in line with the general good than is the satisfaction of his neighbors' desires. Reason must rule and check our altruistic as well as our selfish impulses. We must love our neighbor *as* ourselves, not *more* than ourselves. Doing as we would be done by, means subordinating our desires to the welfare of others to the *same* extent, neither more nor less, than we feel others should sacrifice themselves to us. Only thus can society be reasonable and just.

"Laissez-faire." The greatest happiness of the greatest number is attained under conditions of the greatest possible individual freedom. It takes all kinds of people to make a world, and the more room the world has in it for the self-development and expression of different individual characters, the better chance everyone has to be happy. Paternalism, regimentation, socialism—anything and everything that tended to destroy the freedom of the individual—were intensely distasteful to Mill. In his *Principles of Economics* he advocates the "laissez-faire" policy. In his *Subjection of Women* he demands that women be given the same rights and opportunities for self-expression as men enjoy. All control is to be deplored, except such as is necessary to subject the individual's pursuit of his own happiness to the well-being of the community as a whole. As men become better educated and more wise, we may hope that moral, social and economic problems will solve themselves and will call for less and less social interference and control. In any case, the social, moral and economic ideal lies in the greatest amount of individual freedom and self-expression compatible with the greatest good of the greatest number.

V. DARWIN

The Theory of Biological Evolution. While Mill was developing his philosophy a young man named Charles Darwin (1809-1882) had attached himself to a natural history expedition which cruised around the world in the *Beagle* collecting and studying biological data. The fruit of this voyage, maturing after some twenty-five years of further observation and reflection on Darwin's part, was *The Origin of Species*,

published in 1859. In this work he advanced the hypothesis that living matter is plastic, rather than cast once and for all into fixed forms and species, and that the types it assumes represents its successful adaptation to its environment. As he saw it, life from the first has to struggle for existence against many disadvantageous conditions. In the course of that struggle it assumes a variety of forms. Forms that are not adapted to the circumstances in which they find themselves are killed off, and those which succeed in adjusting themselves survive. The species of animals existent at the present time have come to be what they are as the result of a long process of development in the course of which their structures have been profoundly modified. And they owe their being to the fact that they have proved the fittest to survive in the struggle for existence.

The implications of this theory were at once plain. There was no reason for excepting man from the process of *evolution* by which all other forms of life had been molded into their present shape. He, too, represented a *survival of the fittest* in a *struggle for existence* in the course of which his nature, psychological and physiological, had undergone enormous changes. Further research and meditation convinced Darwin that man had evolved from some species of monkeys akin to the existent anthropoid apes, and that his more remote ancestry was merged with their genealogical tree. His superiority over his simian cousins could be sufficiently accounted for by the principles governing the evolution of all living things. The struggle for existence had eventually sharpened his wits and had conferred certain physical advantages upon him which enabled him to cope successfully with the hostility of other species and to modify his environment to his own advantage. These conclusions were embodied in the *Descent of Man* published in 1871.

The Stir Created by the Darwinian Theory. Just as Copernicus and Galileo, in displacing the earth from its central position in the universe and converting it into a planet of the solar system, had deprived man along with it of all astronomical centrality and importance, so now the Darwinian theory went on to deny him any special biological privilege among the various forms of life that had originated on the earth. He had started from scratch like the others, and like the others he was simply and solely what he had succeeded in making himself.

This new biological concept produced the same stir and provoked the same reactions as did the new astronomy three hundred years earlier. It aroused controversy among the scientists and, at the start, was condemned by most religious bodies.

But the accumulation of evidence since Darwin's time has tended to confirm the evolutionary hypothesis, and it is now generally upheld by scientists. Probably, too, its acceptance by the lay mind today is as widespread as was the popular acceptance of the Copernican astronomy seventy-five years after its promulgation—if not more so. But it is only fair to say that neither it, nor, for that matter, the heliocentric astronomy and the sphericity of the earth, is universally accepted today. Indeed, the teaching of the evolutionary hypothesis, so far at least as man is concerned, is still discouraged in certain institutions of learning.

The hypothesis itself has undergone considerable modification since Darwin's time. Doubts have been raised whether the struggle for existence and the survival of the fittest are sufficient explanation for the process, and whether further determining factors must not be sought. And the *continuous* character of evolution has also been questioned. Considerable evidence has been brought forward to show that it is not an orderly progress step by step, but proceeds by hops, skips, and jumps, in which unforeseen mutations or "sports" occur and establish themselves.

Chapter XXIII

THE EFFECT OF SCIENCE ON PHILOSOPHY

I. SPENCER AND BAIN

Reality Unknowable. The advances in the physical sciences and the doctrine of evolution influenced greatly the further developments of philosophy. Thus in England they conspired with the skeptical, empirical views expounded by Mill and his predecessors to produce the system of Herbert Spencer (1820-1903). Spencer agrees with Hamilton, Mansel, and Mill in regarding the nature of Reality as a mystery which it is beyond the power of the human mind to grasp. Try as they may, both metaphysics and religion come up against a stone wall which they cannot penetrate, and only trip themselves up in logical contradictions and absurdities when they kick at its impenetrability.

But Spencer will have none of Hamilton's assertion that God must exist despite our powerlessness to comprehend him, or of Mansel's doctrine of "negative knowledge" of him. Nor can he admit, with Mill, that God is not inconceivable, but simply a being whose existence may not be inferred from the evidence at hand. The implication of the relativity of all human knowledge to perceived phenomena, which are themselves presented only in relation to one another, is that the absolute and the unconditioned must be, in the nature of things, forever *unknowable*. We may, indeed, trust our instinctive feeling that behind phenomena there is a Reality in which they are grounded. But what that Reality is we shall never *know*. To be sure, we may call the Unknowable the *cause* of the phenomenal world, and describe it as a *power*, but such terms can be at the best no more than vague approximations.

Philosophy and Science Concerned Only with Sensible Experience. The province of knowledge, and therefore of science and sound philosophy, is the field of phenomena. The methods of philosophy and science are the same. Both seek by observation and induction to reach general ideas descriptive of the behavior of the sensible world, and thus to achieve unified visions of the totality of the field in which

they work. The difference between science and philosophy is only one of scope. The sciences observe and infer within limited and sharply defined ranges of research. Philosophy seeks to unify the concepts arrived at by the special sciences and to weave them into one consistent whole, in which everything that happens in the universe shall have its part and receive its final explanation.

If we collate the findings of the special sciences we shall discover certain general principles which may be regarded as ultimate, relatively, at least, to the phenomenal universe, and which may therefore be called *philosophical*. These least common denominators are such things as the sense of a Reality behind phenomena, the general division of experience into subjective and objective aspects, and the co-existence, sequence, impenetrability, and shifting nature of experience out of which the notions of space, time, matter, motion, and force arise. To these we may add ideas like the conservation of energy, the indestructibility of matter, the law of least action, the impossibility of action at a distance, and the like, which may be deduced from the fundamental concepts.

Evolution and Dissolution. Finally, all those first principles about which the sciences cling are themselves threaded on an ultimate law of development which runs through all things whatsoever. Everything, without exception, that occurs in the universe is part of a process in which matter is being either integrated or disintegrated, and in which motion is being concurrently either dissipated or absorbed. Everywhere things are being built out of simpler, scattered, and incoherent elements into more complicated, more unified, and more coherent and stable structures, and everywhere such motion and energy as are not lost in the process undergo a parallel transformation into more diversified and complicated forms. This is *evolution*. Eventually the limit of the integration of matter and the diversification of motion is reached. Then the reverse process of *dissolution* sets in. The complex, integrated structures are broken down, and energy is lost and becomes unavailable.

This formula, laid down in his *First Principles* (1862), Spencer proceeded to apply generally. Two years later he had covered with it all biological phenomena. In the *Principles of Biology* he finds that organisms are more complex integrations of matter than inorganic substances, and that life is a process in which the inner structure of a body is being continually adapted to an environment. Bodies that effect a continuous adjustment of internal relations to external relations *live*. Given this capacity, the entire process of biological evolution

can be explained and can be shown to be simply an example of the ultimate cosmic law.

The next thing for Spencer was to bring psychology within the fold. The first edition of his *Principles of Psychology* had been published in 1855, and followed fairly closely the Associationist doctrine. Now, *mind* had to be worked into the general evolutionary scheme. The processes by which ideas were built out of simple sense data lent themselves readily to the formula of integration and increasing complexity. And in general the parallelism of conscious states with physiological conditions and changes in the nervous system, brought the stream of consciousness within the general formula of evolution.

This, however, is not to say that consciousness can be reduced to terms of physical energy. It cannot. It *accompanies* physical energy under certain conditions. That is all we can say about it. But, Spencer reminds us, mind is itself a phenomenon. It gives us no more clue to the nature of the Real than does the material world.

Sociology. From 1876 till the time of his death, Spencer was busied with the publication of his *Principles of Sociology* and his *Principles of Ethics* in which he sought to reduce all social and moral phenomena to the general law of evolution. History, he tells us, displays a process of integration of families into tribes, tribes into settled communities, and of communities into larger and larger political units—a process which is accompanied by a progressive diversification and dissipation of human activity. Complete integration and diversification would be reached in a wholly stable and orderly social organization in which all individuals were free to express themselves and to live their own lives without interfering with the self-expression and individualism of their neighbors. Individuals, then, have a *right* to self-preservation, to liberty, and to happiness. Since, however, the welfare of the individual is bound up with the welfare of the group, and the community cannot be harmed without injury to the individual, individual rights are rightly abridged when the safety of the group is threatened and can be maintained only by their abridgement. But when the peril to the community is removed these rights are automatically restored.

Spencer goes on to argue at length against socialism and paternalism on the ground that they interfere with individual self-expression. The state, he holds, exists for the sake of the individual, not the individual for the sake of the state. The sole business of the state is to keep the peace, by preventing, through the exercise of its police power, its citizens from coming into internal conflict with one another, and by protecting them from attack from without. For the state to interfere

further with personal freedom is to trespass upon individual rights. Moreover, whatever impedes unduly the exercise of individual liberty and the pursuit of individual happiness recoils upon the general welfare, which after all is nothing but individual welfare. That government is best which governs least—understanding by “least” the minimum of control consistent with peace and order.

Ethics. Underlying Spencer’s social theory are his views on ethics. Ethics is the science of human conduct. Some conduct we call good, other bad. In other words, we attribute *moral* value to it. But what is *moral* conduct, and on what basis do we distinguish between *right* and *wrong*? To answer these questions we must first study the nature of conduct in general. Conduct, properly speaking, is activity aimed at ends. It involves an adaptation of behavior to ideals. Right conduct lies in adjustment, wrong conduct in maladjustment, to the ends and ideals at which human beings naturally aim.

But what are the ends and ideals in question? Spencer’s reply is hedonistic and utilitarian. The desired, desirable and ideal life is one attended by the greatest amount of agreeable feeling. Good deeds, then, will be acts whose intention is to secure the maximum of agreeable feeling for the greatest number. Evil deeds will be acts which detract from it.

To be sure, ethical principles like these assume that a surplus of agreeable over disagreeable feeling is attainable by living beings. Otherwise, we shall be obliged to admit that life is not worth living, and that a morality whose aim is to ensure life and liberty and the pursuit of happiness is topsy-turvy and deluded. But the assumption that life is worth living is, Spencer feels, a reasonable supposition. Most people, at any rate, seem to find it so, seeing how they cling to it, and how impossible it is to uproot the instincts leading to its maintenance and preservation.

When Spencer approaches the problem of applying his moral principles to the complexity of the human situation, his hedonism and utilitarianism depart somewhat from standard. The moral ideal at which we directly aim is not based upon a “hedonistic calculus,” in which pleasures are consciously estimated, and weighed, and compared. It lies rather in establishing a social condition, expressed in the general, evolutionary terms of adaptation to environment, in which the maximum amount of agreeable feeling will automatically occur. Since pleasure is a sign of adjustment, the more adjusted life is to its surroundings the more pleasurable and the happier it will be. Among human beings the environment is largely social, and it is the inter-

adaptation of individuals that counts most in securing the widest diffusion and the greatest amount of pleasurable feeling.

The Evolution of Morality and Religion. The history of ethics reveals, Spencer thinks, a continuous progress, in accordance with the general law of evolution, towards a state of complete interadaptation of individual interests in which all conflicts will be resolved, and selfishness and unselfishness will be indistinguishable. Little by little the sense of solidarity develops, and restrictions which were at first external and compulsory become internal and spontaneous. Conscience appears as a curb upon behavior, but even the conflict between conscience and impulse will be eventually overcome in spontaneous interadaptation and right doing.

As it is, hostility of attitude, he maintains, is giving way to friendship. War is yielding to amicable settlement of differences. Justice, whose basis lies in the law of nature that all living things shall reap what they have sown, has become humanized by a recognition that all may sow as they will, provided they do not interfere with one another. Upon this principle of equal liberty of self-expression for all individuals, with its corollary that none may do as he would not be done by, is erected the whole edifice of human rights and laws. When each individual succeeds in making it the rule by which he lives, the moral ideal will be attained.

In his sociological discussions Spencer gives considerable space to the evolution of religion. Its root lies in dreams and visions, in which the dead reappear and thus impress the primitive mind with a belief in their continued existence. In this way ancestor worship arises, which Spencer regards as the seed from which all religion has grown. Indeed, primitive religion is essentially fear of the dead. From it prayer and placation naturally spring, and are quickly given ceremonial and institutional form.

It needs but another step to people the whole natural world with ghosts or spirits akin to ourselves and to crystallize in fixed and elaborate rites man's attempts at appeasing their wrath and enlisting their help. The fear of the living, which is the beginning of social and moral organization, is now supplemented and reinforced by the fear of the dead, which provides supernatural sanctions for ethical conduct. So, step by step, religion *evolves* and in its evolution follows the general law of increasing integration and complexity, accompanied by diversification of activity.

Bain. Almost contemporary with Spencer was Alexander Bain (1818-1903). Bain was a psychologist of the familiar Associationist type, with

an added interest in the interconnections of psychology and physiology. He also shared the distrust of metaphysics evinced by Mill and Spencer, and was uncompromising in his assertion that it is impossible to know that an external world even exists, let alone what it is like. All the primary qualities, as Locke called them, such as shape, extension, solidity, and the like are nothing but internal sensations, given by the eye and the muscles. So, too, the self is nothing but a bundle of sensations, including those of pleasure and pain, desire, motivation, and the movements in which motives are discharged into behavior and by which desires are satisfied. Since all behavior is motivated and all motives have their grounds, there can be no such thing as freedom. But lack of freedom does not undermine the bases of morality. Morality arises out of the compulsion exercised upon us by social organization. Experience teaches us that rebellion against this compulsion brings social disapproval and even punishment. Experience shows what kind of behavior gets us into trouble, and the association of such conduct with disagreeable social consequences is the basis of the moral sense of right and wrong, and becomes articulate in the still, small voice of conscience.

II. GERMAN NATURALISM

Trendelenburg. The empirical, skeptical, positivistic and naturalistic way of thinking which we have now been following so long, was not, however, by any means confined to Great Britain. It had also a strong foothold in Germany and in France. Just at the turn of the half-century Friedrich Adolf Trendelenburg (1802-1872), though by no means carried away by the naturalistic current, was sufficiently influenced by it to maintain that motion was the least common denominator of both thought and being and therefore the universal principle which it is the business of metaphysics to seek. From motion he tried to deduce space, time, and the categories, all of which he regarded as forms both of thought and objective existence.

He denied, however, that motion is purely mechanical in its behavior. It is, he says, purposive, and it contains within itself a principle of design and self-determination, which expresses itself in organic life and comes to self-fulfillment in conscious selves. This teleological principle points to the existence of an ideal which is forever realizing itself in the world-process. A governing ideal presupposes, in its turn, intelligence and will as the origin of motion. Hence intelligence and will afford the best description we can give of the nature of the ab-

solute and the unconditioned, which some of our categories probably do not fit at all and of which none can give a really satisfactory concept.

German Materialism. Although Trendelenburg had only one foot in the empirical, naturalistic, materialistic current, there were others who were in it head over heels. Among these were J. Moleschott (1822-1873), L. Büchner (1824-1899) and E. Haeckel (1834-1919). All three were agreed that consciousness could be reduced to terms of matter and physical energy, and that the universe was a mechanism, which, being self-existent and self-maintaining, stood in no need of a God to explain its existence and provide it with a purpose. Freedom and immortality naturally shared the fate of God. Büchner's book, *Force and Matter*, published in 1855, had great popularity, as did also Haeckel's *Riddle of the Universe*, which appeared in 1899.

The extreme materialistic position was, however, avoided by W. Ostwald (1853-1932), who tried to reduce both mind and matter to interconvertible forms of energy. It was also looked upon askance by J. J. Lange (1828-1875) and E. Mach (1838-1916).

III. LANGE

Reality Unknowable. Lange, a professor at Zurich and Marburg, started from the Kantian position that the categories of the understanding alone give to experience the forms under which we must think about things, if we are to call them *true*. All valid knowledge is therefore necessarily scientific in character. But the categories into which experience must be cast before it is regarded as intelligible necessarily turn it into a deterministic system subjected to the category of causation and to mathematical formulae. In short, we must *think* in terms of mechanism if we are to think at all. The only possible scientific and *intelligible* view of the world is the mechanical view.

But the mechanical concept, though the only *true* description of the phenomenal world, cannot be extended beyond human experience to things-in-themselves. Of the nature of Reality we can know nothing. We have no more right or reason to assert that it is matter than we have to proclaim that it is mind. Nay more, the mechanical concept and the categories upon which it rests cannot be regarded as *a priori* in the full Kantian sense of the word. They are not imposed upon experience from the outside. They are products and parts of the very nature to which they give a mechanical form, and are developed in accordance with the same laws as govern all her provinces. It is from

the point of view of the materialistic and mechanical hypothesis as a philosophic method rather than a metaphysical description of Reality that Lange's well-known *History of Materialism* is written.

The Possibility of "Value Judgments." However, Lange believes, like Francis Bacon, that, although knowledge buckles and bows the mind to a naturalistic interpretation of the world, the imagination erects and ennobles it by submitting the shows of things to its desires. We create in our fancy ideal orders of various sorts, not necessarily mechanistic, which have esthetic, moral and religious *values* for us. We cannot know whether anything corresponding to them has real and concrete existence, and therefore we cannot compare them in point of their *truth*. But we can compare them in point of their relative goodness and ideality. We cannot, for example, argue that one religion is truer than another, but we may argue that it is more satisfactory. We may, in other words, substitute value judgments for truth judgments in dealing with the ideal world.

IV. MACH

The Theory of "Neutral Entities." The same Neo-Kantian caution as restrained Lange, also kept Mach from joining the out-and-out materialists in their splashings. First, professor of physics at Prague, and then of philosophy at Vienna, he adopted an attitude towards the nature and limitations of philosophy not unlike that of Mill and Spencer. However, he did not feel that an investigation of the problem of the relation of mental to physical phenomena involved an excursion beyond the phenomenal world and the limits of sound scientific thinking.

In dealing with the question he went off on a new tack and tried to steer a neutral course between the materialists and the idealists, which would avoid the difficulties that arise when we attempt to reduce either mental to physical, or physical to mental, phenomena. The complex of experienced qualities—colors, sounds, tastes, smells, tactual and muscular sensations, etc., which make up the sensible world and which we persist in regarding as both inside us and outside us, is, he said, neither internal nor external. The content of experience is neither subjective nor objective. It is simply *there*, or, as he called it, *neutral*.

The contents of experience, however, exhibit interdependence and what we call causality. Certain phenomena do not appear except in connection with others. One condition of the presence of sensations is that they shall be in relation to special groups of phenomena which

we call the sense organs of organic bodies. Another condition is that they shall be linked up with other phenomena, which are not organic. Take, for example, color. It depends both upon the eye and upon light. When the eye closes, or when night falls, it disappears. It is inside me in its relations to my eye, outside me in its relations to reflected light. If the light is shining and my eye is open, it is both a mental and a physical fact at the same time, split by its dual reference into a kind of double vision of itself. In so far as it is hooked to the phenomena we call a nervous system, it appears to be an inner, subjective picture of itself. In so far as it is hooked to the phenomena we call light it appears to be an outer, objective replica of itself.

The Various Conditions of Phenomena. Here is the secret of the distinction we make between the mental and the physical. In so far as any sensible quality is viewed in relation to the sense organs upon which it is partly dependent, we call it *subjective*. In so far as it is supported by other, inorganic complexes of qualities, we call it *objective*. When a nervous system ceases to be attached through its sense organs to other entities, it becomes unconscious, as when we fall asleep, and the phenomena with which it was in contact, and which composed its conscious content, lose their *subjective, mental* character. But, as long as they remain hooked up with entities other than the nervous system in question, they remain *objective, physical* facts, retaining, in spite of not being perceived, all the characteristics they present to the waking organism. If, however, they lose touch not only with the organism but with the rest of their context, they lose their objective, physical status and become purely *neutral*.

For instance, color along with all other entities ceases to be present to the sleeping nervous system, and therefore ceases to be a *mental* phenomenon. When night falls, color also ceases to be a *physical* phenomenon, since its *physical* character is dependent upon the presence of light just as its *mental* character is dependent upon the presence of a nervous system. But the disappearance of color from an object, when light fails, leaves all the other characteristics of the object *objectively* there, since they are no more affected by the sun's setting than by the organism's falling asleep.

But when a nervous system dreams, what happens? In spite of its having seemingly lost all contact through its sense organs with objective entities, other entities are nevertheless *present* to it, and appear to it as real and vivid and objective as its waking experiences. Mach replies that in dreams the organism really is in touch with other phenomena. But, when an entity is dreamt about, it remains hooked up

only to the nervous system, and is floating free of all attachments to all other entities. It is in contact *only* with the sleeping organism, and like that organism has lost contact with surrounding phenomena, and its behavior is influenced solely by the nervous system to which alone it is anchored. Hence, having slipped its objective, physical moorings, it has become a purely *subjective, mental* entity, whereas waking experience, being anchored both to the nervous system and to other phenomena, is *both* objective and subjective, physical and mental.

From this point of view we have no business to speak of phenomena being inside or outside the *mind*, or, for that matter, of an entity called the mind at all. So-called mind and consciousness are simply one way in which phenomena group themselves; so-called physical bodies are another. But phenomena are not thereby divided into two sorts that cannot be interchanged—soul and body, mind and matter, mental presentation and external objects. On the contrary, one and the same phenomenon may pass from one grouping to another, may be now a dream, now a perception of external reality, now an unperceived physical fact. This theory of neutral entities, in themselves neither physical nor mental, but on occasions either or both, has played and still is playing an important part in present philosophical speculations.

Objective References of Scientific Concepts. But Mach had also brought to a head a new difficulty. Heretofore skepticism had found its victims in metaphysical concepts, like God, substance, the soul, a material substratum and the like. Such entities transcended experience. They were not phenomena. Therefore, if knowledge could not be extended beyond phenomena, it was impossible to know whether or not such entities existed.

Mach and his successors, however, extended positivism and skepticism from metaphysics to the results of science itself. The scientist, it proved, was as great a sinner as the philosopher in laying claim to a knowledge that transcended phenomenal experience. The entities he posited as underlying phenomena were not experienced. They transcended experience as completely as did the entities conceived by the theologians and metaphysicians. Nevertheless, the scientists talked of them as if they were not only things-in-themselves existing behind phenomena, but as if their nature could be validly inferred from experience and made the object of accurate scientific knowledge.

But how could either the philosopher or the scientist maintain with any consistency that it was invalid to argue beyond experience to the existence of God, but valid to argue beyond it to the existence of the

atom or the ether? Or how could he assert that, although it was impossible for us to know whether any objective reality corresponding to the concept of the soul existed, it was quite possible to test the concept of the ether vortex or the magnetic field, and know whether it represented a real object?

V. THE DOCTRINE OF THE RELATIVITY OF SCIENCE

Scientific Acceptance of Mach's View. Posed with these questions, a large and important group of philosophers and philosophically minded scientists admitted at once that metaphysics and science were in the same boat, so far as their knowledge of unexperienced entities was concerned. In Germany, Emil Dubois Reymond (1818-1895) and his brother Paul, G. R. Kirchhoff (1824-1887), H. Herz (1857-1894) and Avenarius (1843-1896), all announced more or less decisively the impossibility of extending scientific knowledge beyond phenomena and attributing objective reality to the fundamental entities conceived by science. Besides the great field of phenomena as yet unexplained but not necessarily inexplicable, there are certain scientific problems—like the real nature and cause of matter, motion, force, and consciousness—that are essentially insoluble. Confronted with them, Emil Dubois Reymond proclaimed, we must resign ourselves to the fact that we can never know the answer and must remain forever ignorant.

In England this view was shared by James Clerk-Maxwell (1831-1879), W. K. Clifford (1845-1879), and Karl Pearson (1857-1936). In France its great champion was Henri Poincaré (1857-1912). According to him, the concepts that science regards as fundamental not only have no validity outside experience but no sole and absolute and permanent authority within it. We regard the axioms of Euclid or certain principles of mechanics as if they were the laws of the Medes and the Persians. But a space of four or more dimensions is perfectly conceivable and perfectly consistent. Non-Euclidean geometries can be worked out in which the axioms of Euclid do not hold. So, too, other mechanical principles can be conceived.

The "Truth" of a Scientific Concept. A number, then, of alternative mathematical and physical systems are conceivable and workable. Certain ones, however, prove simpler and more convenient than others in dealing with observed phenomena. For instance—to choose an example of our own—it is still possible to work all celestial phenomena into the old geocentric, Ptolemaic astronomy and make the earth the fixed center about which everything else revolves. But the complica-

tions and inconveniences of so doing are enormous, and the resultant astronomy is unwieldy beyond description; whereas everything becomes comparatively simple and easy to follow and handle in the Copernican system.

Still, it is impossible to assert as an absolute fact either that the earth and the other planets go round the sun or that the sun and the planets go round the earth. It depends entirely upon where we take our stand, and we take our stand wherever we see things in the simplest and most convenient perspective. It is quite possible that as time goes on, new astronomical data will make the heliocentric astronomy as unwieldy as the observations of Kepler and Galileo and Copernicus made the geocentric system. In that case, we shall shift our point of reference to whatever point in space the new discoveries indicate as best adapted to give us the easiest and least confusing view of sidereal behavior.

The same holds of the concepts of the other sciences. They cannot, according to Mach, pretend to an ultimate and final character. They are merely the most suitable way at the moment of viewing the data at present available. New data may come along that they no longer fit, and then our concepts will be altered to suit the new situation.

VI. THE “CONCEPTUAL SHORTHAND” THEORY

But, if the ultimate concepts of science do not refer to anything existing beyond phenomena, and, even within the field of phenomena, are wholly relative to present observation, what is their status? What do they refer to? How do they arise? What is their exact relation to phenomena? The answer to such queries involved what we might call a philosophy of science. This was now forthcoming. Concepts like the atom, the ether, the magnetic field and even the axioms of mathematics are all of one feather with the Ptolemaic or the Copernican systems in astronomy. They are, as Pearson expressed it in his *Grammar of Science*, a *conceptual shorthand* for taking down in brief and succinct form the longhand writing of sensible experience. They stand for nothing, refer to nothing, mean nothing but sensible phenomena; just as the shorthand symbols stand for nothing, refer to nothing, and mean nothing but the longhand words and sentences. Without them we could never condense experience into workable, scientific shape, just as without shorthand the stenographer could never do anything but copy, or set down, in all its original voluminous, tedious, and unmanageable length, the long-winded screeds or dictations of her employer.

Again, just as there are different systems of shorthand, so there may be different systems of mathematics, geometry, physics, etc. Which scientific theory is best will be decided by the same rules as determine which system of shorthand is best. In the one case as in the other, the preferable system is that which does the neatest, briefest, simplest job of expressing in the least possible number of symbols the greatest number of longhand data. But no matter how ultimate and perfect a system of scientific stenography may be, its symbols and concepts never stand for anything but those data. They do not read anything additional into them or in any way enlarge or alter their sense. They do not introduce, so to speak, new words, different from those visibly and audibly spoken. They simply record in condensed form what phenomena say and write.

The same will be the case with all metaphysical and theological concepts. They will be merely useful *methods* of summarizing the value experiences, esthetic, moral, religious and the like, given in concrete individual feelings. They will not be intimations of an "objective" reality supporting these values. God, for example, is no more "existent" than the atom, but is simply a convenient shorthand method of condensing and simplifying the phenomena we call religious experience. And the varieties of religious experience will require each its most suitable shorthand, to condense and simplify its peculiarities and differences.

A large body of scientists and philosophers have accepted the Mach-Pearson view of the limitations of science and the shorthand characters of scientific concepts. But there are also many others who reject it.

VII. SCIENTIFIC ADVANCES

Physics, Chemistry and Mathematics. Meantime, the conceptual shorthand of science was changing with extraordinary rapidity. Helmholtz, William Thomson (Lord Kelvin), Clerk-Maxwell, and many others were developing the undulatory theory of light and of radiant energy, the concepts of the conservation of energy and of entropy, and the vortex theory of matter. The same hands carried on the researches into the nature of electricity made earlier in the century by Volta and Ampère and Faraday. The fields of electrical and magnetic phenomena were consolidated, and a common formula connecting them with the phenomena of radiant energy was sought. Physical chemistry was initiated by Kohlrausch and Arrhenius, and its growth has had great influence upon present theories regarding the constitution of matter.

Already, too, doubts inspired by the failure of the Michelson-Morley and Morley-Miller attempts to detect the motion of the earth relatively to the ether had suggested to Fitzgerald and Lorentz that the dimensions of a body might depend upon its velocity, and that it might become shorter in the line of its direction, proportionately to its speed. The way for Einstein's theory of relativity was thus opened.

These advances in the physical sciences were accompanied and facilitated by new discoveries in the field of mathematics. The concepts of real and irrational and imaginary numbers were developed by Cantor, Dedekind and Weierstrass. Lobachewsky and Gauss, inspired by the unverifiable character of Euclid's postulate with regard to parallel lines, worked out successfully new geometries based upon other postulates. In this they were followed by Riemann and Helmholtz, who suggested that *observed* physical space lends itself as readily under certain conditions to a non-Euclidean as to an Euclidean interpretation. Both sorts of geometry are merely two different conceptual shorthands, of which the Euclidean has generally proved the more convenient.

The Biological Sciences and Psychology. In biology similar strides were made. The cellular theory of living matter, which dated back to the beginning of the century, was now firmly established and threw new light upon the nature of reproduction and organic growth. The mechanism of heredity was investigated, and the dispute over the inheritance of acquired characteristics arose. Weissmann denied such inheritance, and maintained that hereditary characteristics are carried by the germ-plasm which perpetuates itself in the individual organism, immune to any modifications of the organism from without, and is handed on to the next generation untouched by such alterations. The chromosomes were also discovered, and their role as carriers of inherited traits was studied. Weissmann's theory of the germ-plasm has, however, been criticized by Delage and Driesch, and the question of heredity, and generally of reproduction, is still wide open. The subject was further scrutinized by Galton and Pearson and Mendel by means of statistics, and Mendel's law of dominant and recessive characteristics was formulated.

At the same time evidence supporting the theory of evolution continued to pour in from fresh discoveries in the fields of embryology, physiology, and paleontology. The struggle for existence and the survival of the fittest were extended from the conflicts between life and its natural environment, between different species, and between different individuals within the same species, to a possible conflict within

the individual organism between its different tissues and organs. Also, it was suggested by De Vries that evolution, instead of being continuous and gradual, is at times subjected to sudden mutations productive of freaks, or sports, some of which may prove fit candidates for survival.

Mental phenomena as well as biological were brought within the sphere of evolution, and thus the question of man's spiritual as well as biological solidarity with all other living beings was raised. Wallace tried to save the soul from humble origins, by supposing a special infusion into man alone of a new spiritual element. Similar devices are used by those who, while accepting evolution so far as the human body is concerned, balk at extending it to human consciousness.

Psychology also forged ahead under Fechner (1801-1887) and Wundt (1832-1920), who continued Weber's efforts to subject the phenomena of consciousness to exact scientific measurement, and sought particularly to bring them into connection with the fields of physiology and physics. They tried to expand Weber's law and to make it more precise. And they founded their researches upon extended experimentation under laboratory conditions. To them we owe the emergence of psycho-physics and the development in psychological form of the idea of psycho-physical parallelism.

VIII. DURKHEIM

The "Collective Mind." Sociology, too, underwent an elaborate development at the hands of Emile Durkheim (1858-1917), who endeavored to establish the priority of group consciousness over individual self-consciousness. The group, he tells us, has a mind of its own, more primitive, more fundamental, and more compelling than individual minds. Out of this deeper crowd-consciousness, detached, individual people, with particular minds of their own, eventually develop as independent selves. But the collective mind is still dominant in them, and reasserts itself on all occasions. Since the collective mind is deeper and earlier than individual minds, it cannot be described as a mere *collection* of particular centers of consciousness, or as a result of their interaction. It has a real existence of its own, over and apart from aggregates of particular selves.

A social group, then, is an organism, not a mechanism, a whole that determines the relations and activities of its parts, not a whole built up out of its parts and determined by them to be what it is. We feel

this determination at every instant of our lives in the power exercised over us by the intangible forces of social habits, conventions, and duties. A society controls every one of its members, and from that control there is no escape.

Standards of Truth. A society, being a psychological organism, has to be treated as a fundamental unit irreducible to terms of the individuals composing it. In its collective mind, not in individual minds, we find the basis of social values. Morality is one expression of group consciousness. What we believe to be good and right does not emanate from a transcendental conscience or categorical imperative directed from on high. Neither is it the result of a deliberate computation of the greatest happiness of the greatest number, or the outcome of an enlightened estimation of his own self-interest on the part of the individual. It is a manifestation of the collective mind and will controlling individual ideals and behavior. Since the collective mind of one group may differ from that of another, different communities do not necessarily subscribe to the same moral standards. Since the collective mind is an evolving, changing thing, the ethical point of view of one and the same community may alter with time and circumstance.

Even what we shall regard as reasonable and true is determined by group consciousness, not by categories and "inner lights" cast from behind the scenes. "Pure" reasoning and scientific thinking are not detached and impersonal. They may discount, indeed, the bias and provinciality of individual preferences, but they cannot escape the prejudices and predilections of the crowd. They reflect its idiosyncrasies at a given time and place. Truth, in a word, is no more absolute and universal than are right and wrong. There is no such thing as one self-identical truth, forever the same everywhere for all persons. Truth is a social product which varies in different epochs and localities. Like goodness and beauty, it is based neither upon a supernatural reality, nor upon the mind of the individual, but upon the herd consciousness of the community to which it appeals.

By realizing the social origin of all values, intellectual as well as moral and esthetic, we free them both from theological and metaphysical implications and from Protagorean individualism, and convert them into a subject matter that can be scientifically studied and analyzed. We can understand why one system of truth, philosophical, scientific, or theological, has truth value for one group of people, and why a directly opposite system is equally true to another. So, too, we can see how what is considered absolutely right here and now may

be considered absolutely wrong across the street or tomorrow. When thus studied and understood, clashes of metaphysical systems, theological beliefs, scientific hypotheses, moral ideals, and canons of taste no longer distress us. We perceive the necessity and the basis of their relativity.

BRITISH AND FRENCH IDEALISM

I. GREEN

Attack on Utilitarianism and Empiricism. Powerful, however, as was the influence of science upon philosophy, post-Kantian idealism continued to cling to its positions and to extend its battle-lines. With the immediate German reactions to Hegel's teachings we have already dealt. Also, we have noted how Coleridge in England fought for idealism, and particularly for Schelling, and attacked contemporary British empiricism and skepticism. But the idealistic movement did not cross the channel in force till 1865, when Stirling published his *Secret of Hegel*. Once landed on British shores, it rallied to its banner enthusiastic and powerful adherents, among whom T. H. Green (1836-1882) and F. H. Bradley (1846-1924) are the most noteworthy. Green waged war on both the ethical and the metaphysical fronts. On the one hand, in his *Prolegomena to Ethics* he attacked Utilitarianism, which at the time was being ably defended by Henry Sedgwick (1838-1900). On the other, he opened fire against the positivism and naturalism of which Spencer was for the moment the chief exponent. His heavy artillery he found in the argument that the ways in which we think things and the relations we establish between the elements of experience cannot be derived from sense perceptions, Hume and Mill and the other empiricists to the contrary notwithstanding. To connect sense data with one another and to weave relations between them, there must be something over and above experience—to wit, a rational self.

The Nature of the Absolute. So far Green went with Kant. But, like the German idealists, he could not see eye to eye with him so far as things-in-themselves were concerned. Sense-experience is not impressed upon the self from without, it is produced from within. To attribute it to an external source would be to *relate* it to that source. But relations always connect sense data, and cannot be conceived as subsisting between experience and something that is not experienced.

However, an experience that means a larger reality of which we are

a part cannot be created by a finite self. Moreover, the relations by which any one finite experience is hooked together have attachments beyond that experience. They apparently link us to other selves, to an external world, and to a history in which we are incidents. Therefore, the ultimate source of experience and of the relations it exhibits must be an absolute mind of which our finite minds are parts. The content of this mind is the whole world-process. But the Absolute transcends the whole system of relations and the whole content of its cosmic experience, just as we, individually, feel that we transcend our sensations and the various ways in which we connect them.

Not only, however, do the implications of our thinking betray our transcendent character. So does our will. Our consciousness is shot through and through with desire, as well as with sense perceptions. Just as the rational organization of sensible experience reveals to us a self behind it, so the organization of our desires implies a self of which we are conscious, and whose *will* we do, in all our dealings with them. In other words, we have an ideal, which we regard as our true self. Realization of this self is desirable and good. Its realization, as contrasted with the fulfillment of particular and incidental desires, is the *moral* good.

The will of the higher self to subject all desires to its realization is God revealing himself within us as a moral being, just as our relating and connecting of experience is the manifestation of his rational and intelligible character. Truth, goodness, and beauty are all upheld and given an absolute character by an absolute, infinite, and eternal mind.

II. BRADLEY

Concepts and Entities. Bradley launches a wider offensive, not only against the naturalistic-positivistic-empirical point of view, but upon idealisms of the Berkeleian type and all forms of pluralism generally. Take, he says, a so-called thing. It is *there*, and it is something. That is, it has qualities. We treat it, moreover, as if it were more than its qualities, and call it a substance. But *what* is this substance? Is it identical with its qualities? In that case, we are denying the distinction between subject and predicate and rendering sentences and discourse mere meaningless babble. There is no sense in *predicating* qualities of a substance if it is nothing but these qualities. Is the substance then different from its qualities? In that case, when you say, for instance, that the apple is red you are stating that it is what it is not. Do you say that the distinction of the apple from its redness lies in its being also

round? But roundness is not redness. Therefore, if the apple is an apple by virtue of being round as well as red, it is an apple by virtue of combining two logically contradictory qualities, red with not-red, and round with not-round.

Suppose, however, the empiricists reaffirm the position that a thing is nothing but the sum of its qualities, and reinforce their contention by maintaining that so-called substance, in which qualities inhere, is to be regarded as merely the togetherness of those qualities. It is a *relation* between them. Very well. But we must then admit that the subject or substance "apple" is spread out over all the qualities which are together. It is equally there in its redness, its hardness, and its roundness. In that case, however, when we say the apple is round and hard, what do we mean by "apple"? Plainly we are restricting the apple to its redness, which we have no business to do, and turning "round" and "hard" into qualities of that redness—which also we have no business to do.

In the same way we can box the compass, by saying the apple is red and round—in which case we locate the "apple" in its hardness and assert its hardness to be red and round; or by saying the apple is hard and red—in which case we identify it with its roundness and regard red and hard as adjectives predicated of that roundness. All the qualities that are together may be treated both as subjects and predicates, and the relation between them remains as a third something, different from any of the qualities it relates. But, if it is different from them, how can it relate them without itself being related to them by something which is neither it nor they?

The Nature of Reality. Along with the apple we have to dismiss everything empirical, scientific, metaphysical, and theological that has anything to do with *things, qualities, and relations*. Matter and motion, space and time, cause and effect, selves and egos, Gods and Absolutes, are all riddled by the same contradictions. There does remain, however, a kind of core which is positive. Reality must be free from contradictions. It must somehow include all appearances. It must somehow make sense of all their nonsense, since otherwise it would lose its own consistency. To make sense of them it must itself be a single system in which everything is related. It must be an experience of some sort, since being is meaningless apart from being perceived. It must be one experience, not many, since a plurality of centers of consciousness would put it back in the apple-cart.

Furthermore, our own experience is immediate, and a multiplicity in unity. It is an overcoming of incompleteness—though by methods

that involve *us* in self-contradictions. Our knowledge is a thing of degrees. The moral life lifts us from the lower to the higher. Esthetic experience suggests reaches of beauty beyond what is immediately felt. The manner, then, in which the Absolute Experience includes us and our experiences, would seem to be one in which the higher contains the lower, the greater degree the smaller, the more real the less real. Appearance is a manifestation in a lesser and varying degree of something truer than we can know, more beautiful than we can feel, better than we can be. Our "higher" experiences lie nearer to the heart of things, and them we might know and feel again, were we perfect even as God is perfect. The "lower" being more partial, must receive in the Absolute a supplementation such that, felt as God feels them, we should not know them.

III. BOSANQUET

The Nature of the Real. Along with Bradley and Green we should mention Edward Caird (1835-1908), for many years Master of Balliol College, Oxford, and deal briefly with Bernard Bosanquet (1848-1923). Bosanquet rebounded from Bradley, to whom, however, he was heavily indebted, towards Hegel. Human reason, whose pretensions Bradley had so badly riddled, was rehabilitated at his hands and presented as the most complete intimation we possess of the nature of the Real. The Absolute is a systematic, rational totality of all experience, the whole nature of which is expressed in every part, and in whose wholeness every part finds its explanation and its completion. Moreover, since only that which is wholly self-existent, self-sustaining, self-defining, and self-fulfilled is truly *individual*, the Absolute is not only an individual but the only real individual. It is, Bosanquet says, a *concrete universal*. All other so-called individuals, be they particular sense data, or particular selves, are not wholly concrete and wholly existent.

Such being the case, all empirical philosophies, which base themselves upon sense-experience as an ultimate fact, turn things topsy-turvy and transubstantiate the accidental into the essential. So, too, do systems which regard the existence of the *self* as the bed-rock of philosophic thinking. The human "ego" or personality is not truly concrete, individual, and real. It is an incidental and partial manifestation of the Absolute Individual, upon which it is wholly dependent for its existence and character.

To this dependence and incompleteness every department of human

life bears witness. The self is bound up with the experiences we call the body and external nature, and appears to be an incident in this larger whole. Sensation, thought, moral action, esthetic contemplation—all reach beyond themselves to a reality, a truth, a goodness, and a beauty, which complete and perfect them. Man is a social being, whose individuality is forever merging itself in larger social interests and organizations. In short, our whole nature points to the conclusion that our destiny can be fulfilled and our peace can be attained only by foregoing our self-centeredness and our belief in the importance of our private and individual personalities. Salvation lies in throwing ourselves into the spirit and meaning of the cosmic drama, and in humbly accepting and losing ourselves in the incidental roles its plot assigns to us.

The Dramatic Character of the World-Process. We use the terms "role," "drama" and "plot" literally, not metaphorically. For to Bosanquet all the world's a stage, and the whole world-process is a play. The unity and harmony of the Absolute is conceived by him dramatically as well as logically. The Absolute is an artist—a playwright, actor, stage-manager, scene-painter and scene-shifter rolled into one—who himself takes all the parts and recites all the lines in the universal drama he has imagined.

It is interesting to note the appearance of this new variation of the idealistic interpretation of Reality in terms of a personal career. Fichte had thought of the world-process as the career of a fundamentally *moral* being; Hegel, as the career of a fundamentally *rational* being. Now Bosanquet turns to the *artist* for his inspiration and sees in the Absolute a being guided by as great an interest in *dramatic* effect as in logical coherence. This concept of God as essentially an artist has become popular in contemporary idealistic thought.

Since suffering, and sin, and misfortune present no more difficulties to the logician, and are, if anything, rather better "copy" for the playwright, than virtue and happiness, the problem of evil is easily solved by Bosanquet. Sin and suffering do not outrage an absolute reason, and they add to the satisfaction of an absolute artist. They have a tremendous dramatic value and add enormously to the richness of the cosmic drama. The sublimity and compelling quality of great tragedy and the "catharsis" of the emotions it brings about testify to that. But the greatest tragic drama a human being ever conceived sinks into insignificance beside the tragic grandeur and magnificence of the world-process.

Part of the human individual's conquest of his own sin and suffer-

ing lies in his ability to take this dramatic interest in his own fate, and to judge it, not by what it brings him, but by what it contributes to the dramatic perfection of the whole. But man is not only a dramatic critic, he is an actor. As an actor, the humblest individual has a chance to play the role of the tragic hero, who, by battling with misfortune, enduring pain, and expiating sin, triumphs over them even though they slay him. It is within the power of every man to acquit himself nobly in this role. In so doing he is conscious of enhancing and sharing the glory of the Absolute—and that consciousness is his beatific vision.

IV. RAVAISSON AND BOUTROUX

Ravaisson. The idealistic movement in France did not spring so directly, as it did in England, from the German post-Kantians. It returned rather to Kant himself, so far as its origins were Kantian, and it also drew largely upon native sources provided by Cousin and by Maine de Biran, who in their turn were inspired by the Cartesian tradition and by Condillac. The two most prominent exponents of the native way of thinking were Felix Ravaisson-Mollien (1813-1900) and Emile Boutroux (1845-1922).

Ravaisson was largely inspired by Maine de Biran who had infused Condillac's cold statue's passive reception of sensation with a consciousness of effort and will. But the statue was not yet fully awakened. Ravaisson aroused it completely, and turned its will into desire. Consciousness, Ravaisson maintained, was essentially love, yearning, aspiration. It envisaged an ideal and was forever striving to realize an end. It was active, not passive; creative, not recipient. In consciousness regarded as a creative activity, Ravaisson thought he had found the inmost nature of the Real. Everything is the product of spirit. The physical world is only spirit present in lower degree.

As to the relation of the lower degrees of spirit to its complete manifestation in God, Ravaisson is vague. Apparently he wanted to reduce all differences of spirit to differences of degree and, at the same time, avoid pantheism. But he makes one suggestion destined to be of great significance. He regards the habits we form as a kind of hardening of our spiritual arteries, and looks upon the completely uniform behavior achieved by the physical universe as senile and fossilized volition. This suggestion we shall presently find taken up and expanded by Bergson.

Boutroux. Boutroux found further confirmation of Ravaisson's doctrine of creative spirit in his studies of *necessity*. These led him to

the conclusion that we had no right to speak of logical and mathematical necessity, or *a priori* necessary categories of thought, or even of necessary causal relations between events. On the contrary everything was contingent. It might happen or be otherwise. The postulates of mathematics and the principles of science *might* be different from what they are. There *might* be other sense data and other ways of arranging them. Events *might* occur in other sequences and connections. There was then no predetermining reason why we should have the postulates, principles, categories, causal connections, etc., that we did. We just *happened* to have them. That was all.

From the contingency underlying all these seeming necessities, Boutroux did not, however, argue the existence of a real, irrational factor of *chance* in the universe. He turned rather at this point to Ravaisson and argued that contingency in nature pointed to the existence of a free yet orderly Spirit, whose activities were governed by final causes and tended to become fixed habits.

V. RENOUVIER

Reality is Experience. The philosophies of Charles Renouvier (1815-1903) and of Jules Lachelier (1832-1918) were indebted not only to the French tradition but largely to Kant. Renouvier starts on a frankly empirical basis. Knowledge deals with phenomena, and is limited to phenomena. Like Mach, however, he suggests that phenomena are neutral and that their subjective and objective connotations are a matter of the perspective in which we view them. Still, the feeling that experience is *of* something is part and parcel of experience itself. But we must not therefore suppose that this reference is to objects existing outside and independent of experience. It is rather an affirmation on the part of experience that it itself is the ultimate reality. Experience is *of* itself. Phenomena represent themselves. The activity of consciousness is a fusing of the active and the passive participles. Each item of experience is in itself a representing of something, and a something that is represented. Like the traditional serpent it lies coiled with its tail in its mouth.

All reality, then, is within experience. To discover its nature we have only to consult the ways in which experience behaves and the aspects it presents. Such inspection reveals nine general characteristics. Experience exhibits *relations*. It is spread out in *space* and drawn out in *time* into parts and moments that can be *numbered*. It is a complex

of *qualities*. It *changes*. Its changes occur in *causal sequences*. It is a *personal* experience, and it aims at *ends*.

Truth and the Sum Total of Human Interests. As they stand, however, these categories do not fall together into a harmonious whole. They are rather like the bits of a picture-puzzle scattered on the table. In order to put them together, and thus discover what the picture is really like, experience must apply in the first place the principle of contradiction, which shows the pieces that simply will not go together, and which pieces may go together. Which pieces *do* go together or, at least, do *most probably* go together is a matter of *belief*. Belief is an experience of the willing, desiring aspects of experience. It rests upon the *force* with which certain representations and combinations of representations thrust themselves forward in consciousness, and upon the general *satisfaction* with which their presence suffuses experience as a whole. We *believe* in that which engages and satisfies the whole man.

What we call *certainty* and *truth* goes with *belief*. We regard as the *truest* picture of Reality the picture that appeals with the least amount of self-contradiction and the greatest all-round force to the greatest number of human interests. We must not, indeed, allow our desires and emotions to run away with our reason. But, on the other hand, we must not allow the intellect to suppress our moral and religious needs.

What picture of the Real do we piece together when we judge its truth by the satisfaction it gives the whole man? We get a Reality that is ethical, moral personalities that are free and immortal, and a personal, finite God. This picture is drawn not from conjecture or by argument, but directly from the features of experience itself. We *experience* moral demands made upon us by the universe and our response to those demands. We *experience* our moral personality. We *experience* free will. We *experience* a personal God. We *experience* our aspiration toward immortality. The force of these representations and the satisfaction they give our total nature are more than sufficient to counterbalance any intellectual difficulties they may present—provided, of course, we deal with them in as rational a manner as we can. Moreover, the intellect can never *prove* that they are illusions.

VI. LACHELIER

Lachelier's system reminds us more of the German idealists. Starting, like them, from Kant,* he argues with them that the mind itself

produces the experience which it organizes, by means of the categories, into a systematic and intelligible order. Like Hegel, he exalts the part played by reason over that played by the will in creating and manipulating experience, and insists that experience is, first and last, rational in essence. Hence the laws of logic are the laws of being, and our reason, rather than our wishes and our "hunches," is the last court of appeal in deciding what the Real is like.

Lachelier's views were set forth in his *Foundation of Induction*, and an essay on *Psychology and Metaphysics*. He argues there that the mental nature of the Real can be demonstrated both by induction from experience and deduction from the mere existence of thought. Proceeding inductively, an inspection of experience shows two things. It shows in the first place that experiences are only considered real in so far as they are explained and rendered intelligible. We suspect a phenomenon we do not understand. We feel that it must have a place and an explanation in a causal and therefore rational sequence of events. Until we fit it into its place in that order, its presence is disquieting. Experiences, in a word, tend to occur and to hook up with one another in a way *congruous* with the demands of logical thinking. Furthermore, since the so-called external and physical world can be reduced to a manifold of internal sense data, its source and the reason for its rational character must be sought in consciousness, not outside it. But, if the presence of the external world is presence to consciousness, and the objective reality of our experience is synonymous with its being thinkable, then the fact of experience needs a mind to explain both its existence and its nature.

Given the existence of the thinking activity presupposed by sense-experience, we can deduce *a priori* the necessity of a phenomenal world from the blank *being* of such an activity. To be is to be something. To be something is to have an intelligible form and structure, which Lachelier finds in space, time, causation, matter, and the mechanical principles, generally, in terms of which we arrive at a scientific *understanding* of events and things. To attain complete being, however, thought must enact these principles in a concrete, individual, pictorial manner and thus create a world of sights, sounds, and other sensible representations exhibited in space, time, and causal connections. But the story is not yet finished. The mind must *reflect* upon its handiwork, and, in the act of reflecting, must become conscious of itself and of its own free, spontaneous and creative activity. These three stages are the bases, respectively, of science, art and religion.

In the mind of God all truth is enshrined. Finite selves are created

by God, and attain to perfect knowledge and freedom in so far as they unite their minds and submit their wills to his.

VII. FOUILLEE AND GUYAU

As we leave France, we may mention in passing, Alfred Fouillée (1838-1812) and his pupil Jean Guyau (1854-1888). To Fouillée both idealism and materialism give equally one-sided and unsatisfactory pictures of the nature of Reality. It is impossible to reduce the physical world to terms of subjective experience pure and simple. It is equally impossible to reduce consciousness to terms of matter in motion. Nevertheless, the dualistic opposition of the one to the other must be overcome. Fouillée effects this by supposing that the mental and the physical are both manifestations of one and the same impulse to self-expression, which is the essence both of thinking and physical activity. To these self-realizing entities he gives the name of *idea-forces*. In our own conscious activities we get an immediate experience of their nature. We are entitled to read processes of a similar sort into the external world, and to regard the Real as composed of evolving impulses towards self-fulfillment.¹

Guyau attempted a similar reconciliation of the mental and the physical. But he found his least common denominator in a drive towards synthesis and unity. This, in his opinion, constitutes the core of Reality. It is manifest through all physical activity, all vital processes, and all psychological phenomena, and reaches its most complete expression in morality and social institutions.²

¹ Fouillée's chief work is *L'évolutionnisme des idées-forces*.

² For Guyau cf. *Esquisse d'une morale sans obligation ni sanction* (1885); *L'irréligion de l'avenir* (1887).

Chapter XXV

GERMAN PHILOSOPHY 1850-1900

I. FECHNER

The scene now shifts to Germany once more. We begin with G. T. Fechner (1801-1887), whom we have already mentioned as a psychologist and as a notable contributor to psycho-physics. Though he spent the greater part of his life in the first half of the nineteenth century, his more important works appeared after 1850. His philosophic speculations led him to the conclusion that the physical and the psychical are one. The physical is the form in which one conscious entity appears to other conscious entities. My body is how I look to Tom, Dick and Harry. My consciousness is what I am in and for myself. This is true of all organic bodies, in which the whole determines and dominates the arrangement of activities of the parts. All such bodies conceal souls.

However, since Fechner extends the organic analogy to the whole universe, nothing exists that is not part of an animated body. Not only do plants and animals possess souls, but the earth and the stars possess them too. Finally, there is a universal world-soul whose body is the total physical universe. This cosmic soul, of which all other souls are parts, is God, in whom all things live and move and have their being.

II. LOTZE

Nature of Truth and Reality. Far more important as a philosopher, and, indeed, the most distinguished metaphysician of the German group we are now considering, is Rudolf Lotze (1807-1881). Self-confessedly he owed much to Leibnitz and to Weisse, who, it will be remembered, attacked Hegelianism because of its overemphasis of the head and insufficient recognition of the claims of the heart. But Lotze had also studied medicine and physiology and physics, and was convinced of the importance to philosophy of scientific method and scientific theory. He saw, however, that scientific knowledge was itself an act of faith in the existence of truth and in the power of reason to

attain it. We could not *prove* this faith, any more than we could prove the validity of our conviction that phenomena exist, or of our belief that values like beauty and goodness are real.

Lotze was disposed then to take a wide and eclectic point of view, and to give to esthetic, moral and religious values equal weight with the results of science in determining his system. Indeed, he felt that the business of philosophy was to show how the demands of phenomenal fact, of logical truth, and of moral value can all be met by one and the same world.

The Concept of Mechanism. The demands of science are met by the concept of mechanism. For that matter, the universe must be thought of as running like a machine, if its behavior is to be rendered intelligible. The mind cannot exempt anything from the operation of mechanical principles, not even itself, if it is to *understand* things. Biology and psychology are mechanical sciences, like physics. Vital and conscious processes can only be explained by the same laws as govern the movements of the stars and chemical reactions. Upon these points Lotze cannot insist too strongly.

Can we reconcile the mechanical hypothesis, which we must accept if the world is to be made intelligible, with the experienced facts of the case, and with our esthetic, moral, and religious demands? In answering affirmatively the first part of the question Lotze ranges himself with the idealists. The concept of mechanism does not commit us to materialism. It may be a description of how *consciousness* behaves. Our spatial, temporal, and causal ways of viewing phenomena are forms of sensible intuition. So-called matter and force are not even that. They can be shown to be secondary ideas derived from the forms of space, time, and causality. We have no need to go outside the mind to discover the stuff of which the mechanism is made. Reality is mental in its essence.

At the same time, Lotze disagrees with the absolute idealists. Reality is not to be thought of as an absolute thinker, of which finite selves are aspects. It is rather to be conceived after the organic analogy, as an interconnected whole composed of semi-independent centers of consciousness who bear much the same relation to the whole as the cells of which it is composed bear to the total organism. The mechanical hypothesis is the form under which these centers of consciousness make their relations to one another intelligible to themselves.

When we say this, we are also suggesting how the mechanical nature of the world can be reconciled with the values it displays. When we look at a machine, we find ourselves asking not only on what prin-

ciples, but *for what purpose*, it runs. What, we say, is it *designed* to do? This question we may also properly ask of the mechanical constitution of Reality. For what purpose and to what end do the centers of consciousness of which the Real is composed interpret their experience mechanically, and make it appear as bodies moving in space, changing in time, and affecting one another according to the law of causation?

To answer this question, let me examine my own experience. I find in it my body, which is peculiarly *mine* and which I feel from *within*. At the same time my body is also outside me and belongs to an external world of bodies in general, to whose laws it, like them, is subjected. My body, then, mediates between me and the outer world. Furthermore, without my body and my sense organs and their causal, mechanical connections with the phenomena I call other bodies, I could not get into contact with other centers of consciousness. May we not say, therefore, that the *purpose* of the mechanical construction of my body and of its being geared up mechanically with other bodies is to permit my soul to interact with other souls, through the mechanical enmeshing of my body with their bodies? May we not further say that the purpose of the universal mechanism is precisely to enable all the conscious components of the Real to interact and intercommunicate with one another?

Interaction Between the Centers of Consciousness. The problem of whether and how the mind can interact with the body, does not trouble Lotze. The method by which interaction of any sort is effected, is, he thinks, a mystery. But how the soul acts on the physical organism, and how the physical organism influences the soul is no more mysterious than how one body acts upon another. All interaction is of one piece. In certain circumstances certain things do happen, whether it be one billiard ball set in motion by another, or the sensation of light "caused" by the impact of light upon the retina, or a muscular movement initiated by a conscious volition.

Having thus established the fact that the "monads" have windows through which messages to and from an outer world do go in and out, we can better understand the nature of construction of experience. The qualities we perceive outside us are relations with other conscious centers, established by means of our sense organs. The spread out, spatial character of experience, and its tendency to coagulate into separate clumps of qualities incapable of interpenetration and of occupying the same space, indicate the plurality and the individuality of the separate "souls" which constitute the Real. The messages we re-

ceive suggest, moreover, that in addition to finite centers there is a universal mind which creates and preserves them and supports the external universe as a whole. Individual souls are somehow both parts of this cosmic mind, and at the same time separate persons.

We can now understand the relation of mechanism to the world of values. Mechanism not only satisfies our demand for an intelligible world, but, as the means of interaction and intercommunication between souls, it is a means to realizing moral and social and religious values, which rest upon a *fellowship* between the conscious centers of which Reality is composed. Its *purpose* is to make goodness, and beauty, and communion with God operative among men.

Self-Consciousness not Dependent upon a Plurality of Selves. Lotze attacks Fichte's view that there can be no ego without a non-ego, and that therefore interaction and intercommunication are necessary to personal self-consciousness. On the contrary, he maintains, self-consciousness is bound up with the mere fact of existence in and for itself, whether or not the thing so existing has a non-ego with which to contrast itself. Hence he concludes that the personality of God is not dependent upon and conditioned by interaction with other persons and limitation by them. In other words, an infinite person may exist—and this God is. For us, however, who are finite and whose personalities are incomplete modes of the divine life, the contrast and the give and take between the ego and the non-ego are indispensable conditions of approximating in our lives the goodness, the beauty, and the peace which are God's completely and always.

III. VON HARTMANN

Will and Idea Two Aspects of an Underlying Reality. Besides Lotze, there are two other men who figure prominently in the German thought of the period. They are Eduard von Hartmann (1842-1906), and Friedrich Nietzsche (1844-1900). Von Hartmann sided with Schopenhauer against Hegel in maintaining that the Real is not essentially rational, and that the world is Will as well as Idea. But he could not swallow Schopenhauer's assertion that the world is more Will than it is Idea, not to speak of Will's being the essence of Reality. The intellect, he claimed, cannot be subordinated to the Will and be a mere instrument evolved by it as a means to self-assertion and self-fulfillment. For it is inconceivable that a Reality whose essence is blind and aimless striving should assume a fixed and intelligible form like Schopenhauer's world of Platonic Ideas. The most that Will can do

is to will to exist, but how it shall exist and what form it shall assume are determined by what Hegel called the Idea. Will and Idea, then, are distinct principles, neither of which is derived from or subordinate to the other.

At the same time, these two principles are not grounded in two separate metaphysical entities. They are rather—and here von Hartmann agrees with Schelling—two separate aspects of one and the same reality, which is neither Will nor Idea, nor any form of consciousness whatsoever, but is best described as *The Unconscious*. Out of the Unconscious, consciousness arises as an irrational, purposeless Will that there shall be a universe, accompanied by a coherent, logically framed representation or Idea of what the universe shall be.

The process of creation is a process of becoming more and more conscious, in which the Idea is made clearer and clearer, and its opposition to the irrational Will appears more and more pronounced. First, the Unconscious displays itself as a material, mechanical world in space and time. Then, in the course of the evolution of the earth, it prepares the way for living manifestations of itself, and so eventually for man, in whom it becomes self-conscious.

Since all activities spring from the Unconscious, all the aspects and levels of existence are bound together by mysterious bonds of sympathy which explain much that would otherwise be inexplicable. For example, in the Unconscious are rooted our instincts, our impulses, our desires, the interactions of mind and body, and the social ties that bind men to one another. Out of it spring the affinities of love, the thrill of beauty, and the ecstasies of mystical religious experience.

Existence an Evil. In becoming self-conscious, the Unconscious is made aware of the situation it has created—a situation that von Hartmann, like Schopenhauer, regards as essentially evil. Willing and existing are infected with pain and frustration and discontent. Hence it would have been far better if the Unconscious had remained unconscious, and had never become, as Will and Idea, a world. However, if it had to become a world, it could not have become a better one. It has built up a structure calculated to secure the least possible amount of evil and the greatest possible amount of good. It has provided the anesthetic of grateful sleep for all conscious beings. It has drugged youth with carefree enthusiasms. It snuffs out old age with kindly death. It condemns nothing it creates to the curse of endless existence, but relieves of its being everything that is born, and so shifts the otherwise intolerable burden of existence from generation to gen-

eration, and sees to it that each new individual upon whom the burden is imposed shall bear it but a little while.

Redemption an Acceptance of the Will to Exist. Nor is the Unconscious cut off from final and complete redemption. But it cannot be saved, as Schopenhauer suggested, by the practice of private asceticism and denial of the will. We must rather run our race and fight the good fight, shoulder to shoulder with all else that lives and suffers. We must not only renounce vain hopes, like the hope of happiness here or hereafter for the individual or the race; we must spread the Gospel of renunciation. We must immerse ourselves in the suffering that the Unconscious has brought upon itself by willing to exist. We must not seek the partial escapes from it or the mystical denial of it advocated by Schopenhauer. We must rather accept it, and welcome it, and experience it to the fullest. For suffering is the instrument of our salvation and of the salvation of the whole world. Through it the Unconscious expiates the crime of willing to exist, and only by accepting our share of that suffering can we contribute our due to the oblation made by the Unconscious for the sin of having become a world. When that oblation shall be complete and acceptable, then there will be no more consciousness, no more pain, no more existence, and the Unconscious will enter once more into the bliss of Nirvana, in which it dwelt before the foundation of the world.

IV. NIETZSCHE

Life. Friedrich Nietzsche (1844-1900), one of the most influential of the post-Hegelian German philosophers, was born in Rocken in Thuringia. He was descended on both sides from a long series of theologians, and was brought up accordingly. But temperamentally he was a born rebel, emotional, passionate and visionary. He was also at heart a poet, and in much of his work, which is, so to speak, sung rather than spoken, it is hard sometimes to hear the words for the music.

During his student days at the Universities of Bonn and Leipzig he broke completely with the family tradition. Through his studies in philology, which was at that time his chief interest, he fell under the spell of ancient Greece, whose way of life at its best struck him as vastly superior to that developed in Europe under the influence of Christianity. And a chance purchase of *The World as Will and Idea* made Schopenhauer thenceforth a dominant factor in his thinking and clinched his dissatisfaction with western civilization.

While still at Leipzig, he was offered a professorship in philology at the University of Basel, in Switzerland, which he occupied until increasing ill-health and decreasing interest in philology induced his resignation. The greater part of his philosophical work was done under adverse conditions due to his invalidism. In 1888 he went completely to pieces, and the next year had to be confined in an insane asylum, where he died ten years later.

Disgust with Western Civilization. Nietzsche's revolt against the modern world was perhaps intensified by the contemporary spectacle. The social and economic revolution through which Germany was passing in his youth, in a transition from feudalism and agriculture to industrialism and the attendant rise to power of a *nouveau-riche* middle class, was in Nietzsche's opinion no advance. If anything, the bourgeois theory and practice of life only illustrated all the more clearly the defects that from the beginning had vitiated western Christian ideals, standards, and institutions, and the philosophies that reflected and rationalized them.

From the beginning, he felt, the Germans had been the arch-enemies of Graeco-Roman culture and the instigators of western decadence. They had overrun and destroyed the Roman Empire; they had nullified, with Luther and Protestantism, the revival of classical culture and ideals by the Renaissance; they had warred ceaselessly against those countries in which the Graeco-Roman tradition still lingered. And now the Germans, as a result of the revolution, were unifying themselves under Bismarck for the purpose of extirpating the last traces of European culture inherited from the Greeks, and were completing the wreck of western civilization which they had already almost ruined with Christianity.

To liberate, before it was too late, humanity from the degradation to which the Christian, and especially the Teutonic Christian, outlook upon and way of life had reduced it, a radical spiritual, and for that matter moral and social, revolution was necessary and imperative. The nature of this revolution was indicated by Schopenhauer, revised and corrected in the light of a revised and improved version of the Darwinian theory of evolution.

The Will for Power. Nietzsche agreed with Schopenhauer and other German idealists in rejecting the notion of a material substratum, or things-in-themselves underlying phenomena, and with Schopenhauer in relegating intellect and reason to a position subordinate to that of the will. The essence of the universe is, as Schopenhauer had pointed out, a *Will to Live*. But, in Nietzsche's opinion, Schopenhauer had

left the will to live a vague concept empty of concrete content. Further analysis, he felt, shows that the will to live is an exhibition and *utilization* of power. To be is to be *strong*, strong enough to exist, to survive, to assert, to affirm, to hold one's own and go one's way. The will to live is, then, essentially a *Will for Power*.

The *Will to Live* Schopenhauer had depicted as assuming many forms blindly at war with one another. The *Will for Power* Nietzsche broke up into a multiplicity of "quantities of force" in a state of conflict and tension with one another. They are the "substance" of the Real, and the tensions they set up constitute its structure. However, the play of forces, of which the universe is composed, is not mechanical. Nothing is absolutely predetermined. Nor are the "quantities of power" everlasting. They arise out of nothing, they are constantly threatened by disintegration and annihilation, and they return to nothing when their course has been run. But while they exist they are essentially efforts to resist annihilation, to defy their mortality, and to postpone the lapse into the nothingness that perpetually threatens and eventually engulfs them, but out of which new "quantities of power" are ceaselessly creating themselves *ex nihilo* to replace them.

Organic and Conscious Power. In their unremitting exertion of the power to exist, they utilize one another as a means to self-perpetuation and self-development, and the stronger dominate the weaker and reinforce their own strength from them. When these "quantities of power" attain the status of organisms, they evolve all sorts of devices of offense and defense with which to cling to life, and we have the Darwinian struggle for existence and survival of the fittest.

At length, organisms become aware of themselves and develop conscious will and intelligence, the most advanced existent forms of which, so far as we know, are human minds. But just as there are no material substances or metaphysical things-in-themselves underlying the stream of physical phenomena, so there is no immaterial entity or thing-in-itself, such as a soul, or self, or ego, underlying the stream of consciousness. Each individual "self," like each individual object, is a complex of forces and tensions, of strivings to exist, interrelated with the all-embracing complex of "quantities of power" that constitutes the universe.

The Eternal Return. Time is infinite, but the possible diversifications of the Will for Power, and their possible combinations and tensions are finite in number. Hence in the course of infinite time the same tensions and combinations are bound to recur, bringing with them the same world, and repeating its history. But since nothing is pre-deter-

mined and the recurrence is not mechanical, the repetition is not stereotyped and the return may be spiral, not cyclical. You and I, for example, will be raised from the dead an infinite number of times, and will live our lives over and over again. We shall be born in each new existence on the level on which we died in the preceding one. But we are free always to make the life we have inherited stronger and richer than when we lived it last, and to carry this added strength and richness over into our next reappearance, and thus be reborn on a higher level and repeat our lives on a grander scale. It behooves us, then, to live our lives here and now as we would wish to re-live them, refraining from all that we would not care to repeat and pursuing and exploiting the experiences we would.

Criticism of Schopenhauer's Pessimism. Since each human being is a manifestation of the Will for Power, his fundamental necessity and desire is to be strong—is to exert and exhibit power in all its manifestations. The profoundest and highest exhibition of power lies in the moral and spiritual strength to accept without evasion or complaint Reality for what it is, and to face human destiny without flinching and make the best of human life as it has to be lived.

At this point Nietzsche broke completely with both Schopenhauer and Darwin. While accepting the harshness of the universe and the tragic character of human life from which Schopenhauer drew such pessimistic conclusions regarding the character of existence and the way of human salvation, he could not agree that existence was therefore essentially evil, and that salvation lay in escaping from it and in destroying the Will to Live.

The weak man, indeed, may quail from and vituperate both the actual world and actual human nature, and seek salvation by backing away from and severing his connections with the one, and inhibiting, suppressing, and mortifying in himself the other. And he may concoct in his religion and philosophy excuses for this attitude and behavior. But for the *strong* man life in spite of, or rather because of, its essentially brutal, terrible, and tragic character, is essentially good. The strong man *loves* the possession of body, passions and parts, the exertion of power, the rough and tumble character of existence, and the struggle and the conflict it imposes upon him; even the blood, the sweat, and the tears that are the elixir of conscious existence. The affirmation of the Will to Live, then, which Schopenhauer had regarded as the root of all evil, is really the source of all good, and its negation, which Schopenhauer had proclaimed to be the way of redemption, was in reality the damnation of man.

Criticism of Darwin. Darwin had erred in much the same way. For him the struggle for existence was a struggle on the part of the organism to adapt itself, or in other words to *submit*, to its environment, and the fittest to survive were those whose adjustment was the most complete, or whose submission was the most abject. For Nietzsche the struggle for existence is a struggle *against* the environment, a struggle to adjust not the organism to the exigencies of its surroundings but those surroundings to the exigencies of the organism. And the fittest to survive are those who are *strong* enough to cope with the environment and submit it to their desires and needs. For that matter, survival is not an automatic affair as Darwin had imagined it to be. Nothing survives that does not actively *want* to survive, and the fittest are those in whom the Will to Live is most powerful.

Escapes from Reality in Dreams and Illusions. In its human manifestations the Will for Power expresses itself in two contrasting ways. It fulfills itself most profoundly and completely in passion, emotion, deep and exuberant feeling, action, and a fighting spirit. But man is a spectator as well as an actor, an intellect as well as a will, a poet and a dreamer as well as a warrior. He yearns for peace and tranquillity in a world better, more beautiful, more orderly and more rational than the actual world. So it is that he dreams dreams and sees visions in which he *pretends* that existence is not what it is, and thus in his imagination humanizes the inhumanity of the universe.

It is in these dreams that the weak and the over-intellectual take refuge from existence. But their dreams reflect their dislike and their fear of the turbulence and harshness of the actual world. They are opiates that the weak concoct for the express purpose of drugging themselves with a peace of mind ignobly bought by a surrender of the Will for Power and by a retreat from Reality. Moreover, the weak *substitute* the dream world for real existence. They deceive themselves into believing on the one hand that their falsifications of the world as it is represent its true essence, on the other, that those aspects of the universe which their weakness impels them to falsify are neither final nor profound.

The illusions and self-deceptions of the strong, on the contrary, reflect an affirmation of the Will for Power and an exultation in the actual world. They falsify life in the interest of strength, not of weakness. They enshrine the ideal of a universe more completely accepted for what it is, without evasion, palliation, or excuse of its inhumanity, and of a mankind endowed with more power to deal with it, to find value in it, and to feel at home in it, as it is. They picture cosmic

power at last successfully confronted and defied by human power, and by virtue of that defiance allied with it.

Again, the strong do not *substitute* their illusions for Reality, as do the weak. They do not confuse the real and the ideal. They see that the illusion can cease to be an illusion, and that the ideal can be realized, only through their own efforts and an intensification of their own powers.

Such illusions, so cherished, act as tonics, not sedatives, to human virility. They excite the Will for Power instead of debilitating it. They enrich, rather than impoverish, human experience. They make the strong still stronger. They are weapons of offense, not of defense.

The Secret of Greek Superiority. As Nietzsche developed this train of thought, he found evidence for his conclusions in the various aspects and activities of human life. In the first place it gave him his clue to the superiority of Greek civilization. Admirers of antiquity, like Goethe and Winckelmann, had attributed to the Greek a cool, statuesque, and somewhat vacuous serenity, poise, and sweet reasonableness, supposedly originating in a successful negation of, and detachment from, all that is turbulent and disorderly and savage, both in the universe and man. This, according to Nietzsche was rank nonsense. The greatness of the Greeks was to be found in the fact that they were powerful enough to meet head-on the universe and the fate it had imposed on man, to recognize and contemplate without fear the dangers and horrors of the human situation, and to open their minds and their hearts to existence as it is. They were *strong*, and they did not have to emasculate Reality in order to deal with it.

Dionysus and Apollo. Both Greek religion and Greek drama bore witness to this. The Greeks worshiped both the calm, all-seeing, all-knowing Apollo, the deathless one, of easy and painless life, the serene patron of the Muses; and Dionysus, the leader of the wild Bacchantes in their frenzied dance, the god of intoxication and orgy and ecstasy, of passionate self-surrender and passionate enjoyment—the god, moreover, who not only lived with supreme and divine intensity, but who also suffered and died, as man did, and rose again triumphant, to become once more, by decree of Zeus, the lord and savior of the world.

So, too, Greek drama at its greatest succeeded in investing with a *tragic* value the most terrible examples of what man suffers at God's hands. Thus it turned them into things of *beauty*, which man could contemplate with serenity and esthetic delight, and a quickened sense of his own strength and dignity. In so succeeding, great Greek tragedy harmonized and fused all that Apollo stood for with all that Dionysus

exemplified. It took the raw *stuff* of life, turbulent, terrible, and full of suffering, and gave it *form* and *plot* and *magnificence*.

The reason for the decline of Greek civilization was now evident. The Dionysiac and the Apolline, which had been associated and fused at the moment of Greek greatness, became dissociated and opposed to each other, and the Apolline, instead of giving articulation, form, and order to the Dionysiac, supplanted and suppressed it, and thus became an expression of the negation, not the affirmation of the Will for Power. For this, in Nietzsche's opinion, Socrates and his followers were largely responsible. Thanks to their addiction to knowledge and logic, and analysis, and to their undue exaltation of the intellectual over the emotional and volitional activities, everything the Greeks experienced or did became "sicklied o'er with the pale cast of thought." They began to say "nay" rather than "yea" to the tougher and rougher features of life, and to reformulate the universe in terms that sought to excuse such negation.

Art. These considerations suggested to Nietzsche a theory of the nature of art and the function of the artist, in general. Art is generated by and gives expression to two impulses, the Dionysiac and the Apolline. The Dionysiac provides, or should provide, its inspiration and its subject-matter; the Apolline should canalize this inspiration and arrange and articulate this subject-matter in a definite form. The fusion of the two, which takes place in great art, transforms existence from something demanding primarily *action* of some sort into an object of serene and sustained *contemplation*, but without thereby eviscerating it of any of its characteristics, even the most terrible. This transfiguration of existence, including man's lot in the universe, frees it from its "tensions," and by so doing converts it into a source of esthetic satisfaction and a thing of beauty. Hence a work of art makes its subject-matter, however dreadful, congenial to man and a source of human value.

However, the esthetic transfiguration of the terrible aspects of existence can be effected and appreciated only by the *strong*, who in their practical relations to the universe are not frightened or shocked by anything, and who accept everything as an integral part of the world and a natural episode of human life. The weak, who try in every way to hush up everything the existence of which they are too cowardly to admit and face, will denounce as ugly and esthetically revolting all works of art that depict anything they dread or of which they "morally" disapprove.

In investing with beauty *all* existence, no matter how horrible and

hostile, man is hurling the greatest of his defiances against the ways of God to man. He is daring to *avenge* himself on nature for her treatment of him. In the work of art he shows her to herself as she is, dreadful in her features and savage in her gestures. But he also shows her the strong man, not panic-stricken by them as she might expect, but deriding them, as it were, by taking pleasure in contemplating them, and pride in that with which she thought to humiliate him.

By thus clothing the naked terror of existence with the value of beauty—a value which without the intervention of the artist it would not possess—great art proves itself the most potent of the illusions by which the strong man lives. It is the supreme test of his strength, and the mightiest instrument of his salvation. For art possesses, like love, the power to invest the beloved with an added and fictitious beauty which erases all defects. Again, both the artist and the lover draw added strength from their infatuation, and their passions and their determination to possess are all the more inflamed by the contemplation of the beauty they have imputed to the object of their love, be that object a mistress or existence as it is.

Furthermore, the artist can deceive others into pretending that the source of his inspiration and subject of his portrayal, whatever it may be, is as beautiful as he himself finds it. By enabling them to see and feel whatever he depicts as he himself sees and feels it, the great artist can make anything he chooses valuable *esthetically* to all those who are strong enough to receive and appreciate his work. Here it is, in its power to make *everything* seem beautiful, however terrible it may be, that the secret of the superiority of art over all other forms of self-deception lies. For neither religion nor philosophy can create in the strong man, at least, the illusion that everything, however terrible, is *good*. Nor can science deceive him into believing that the disorder and turbulence of existence are orderly and rational. In a word, the esthetic value is the only value the strong can impute to the *whole* of existence, and art is the only means man possesses for humanizing in its *entirety* the inhumanity of the universe.

The Decadence of Western Civilization. These meditations upon art were only part and parcel of an all-inclusive reflection upon western Christian civilization, the depths to which it had degraded man, and the means of redeeming him from it. As Nietzsche saw it, to the decadent, Socratic search for *logical reasons* for the spontaneous, non-logical, non-rational, violent play of power that actuates the universe and motivates human conduct—a search that had been responsible

for the downfall of Greek culture—Christianity had added a still more decadent demand for *moral justifications* for everything man and the universe did. Subjected to the paralyzing effect of this double scrutiny by the Socratic intellect and the Christian conscience, Reality was completely emasculated, and all the strength, the zest, the guts, and the joy of living were taken out of the western way of life. The Dionysus within us was slain, and the Apollo, now assimilated to the effeminate Jewish-Christian God, provided not only the shape but the inspiration, the sum and the substance of human living.

What was needed, then, to save western civilization, if indeed it was not past redemption, was a resurrection of Dionysus in the human heart, a recovery of virility, a reaffirmation of the Will for Power, and a new fusion of the Dionysiac with the Apolline. A new ethics and a new religion were necessary, expressive of this fusion, which instead of reprobating and inhibiting, would encourage, sublimate, and canalize the great driving forces of human life, would restore the dignity and grandeur of man's destiny in the universe by recognizing the reality and the immensity of its tragedy, and would reinstate man in the complex of conflicting powers and tensions which lie at the heart of all existence.

Such a regeneration of humanity did not seem impossible to Nietzsche. Indeed, he believed that in the field of art its beginnings could be seen in Wagner's defiance of the old Apolline musical forms, in the unprecedented passion, exuberance and magnificence of his music, and in his harking back to the mighty warrior gods and heroes of the pre-Christian Germanic theology for the subject-matter of his operas. For a time Nietzsche much admired Wagner, and this admiration led, while it lasted, to a warm friendship between them.

Moreover, the doctrine of eternal recurrence suggested that a rebirth of Dionysus was at hand. Man, at the moment, could scarcely be imagined as more abject and impotent. The cycle must, then, swing upward, and the Will for Power, denied for the last two thousand years, must reaffirm itself.

The Superman. At this point a new idea which greatly excited him suddenly flashed into Nietzsche's mind. The "eternal return" was spiral, not a closed circle. The universe *evolved*. Hence the reaffirmation of the Will for Power must surpass all former affirmations of itself. It must be accompanied by a further *evolution* of the human race. From the man of the present must spring a being endowed with greater strength than humanity has as yet possessed—a being capable of living more deeply, more richly, more passionately and more

exuberantly, of enjoying and suffering more intensely, of hurling more majestic defiance at the universe, and of humanizing and transvaluating its inhumanity with a splendor hitherto unachieved. Man will and must beget the *Superman*, to whom all races will contribute the blood of his body and the latent powers of his soul, and who will be a more splendid instrument of the Will for Power and temple of the risen Dionysus. Indeed, the whole evolution, so far, of the universe and of man may be regarded as a preparation for the advent of this glorious being.

The Superman will rejoice in the possession and exhibition of strength in all its forms, in the brute and terrible natural forces with which he must contend, and in his struggle with them. He will despise every sort of weakness, physical, mental, and moral. But he will not use his power to do violence to and exploit the weak. For physical violence is a weapon only of the weak and a puny weapon at that. The Superman will be magnanimous. His greatness will be greatness of soul. His strength will be an inner strength of character—the strength of daring to live completely and magnificently, shrinking from nothing, undaunted by nothing that can befall him. He will live the part of the hero of a great tragedy, and will transcend the weaklings of today as such a hero transcends the actors in a cheap and vulgar melodrama.

The Abjectness of Christian Ethics. To beget the Superman humanity must forswear all the values it now lives by and create new ones in their place. This transmutation of all values will involve the destruction of the timid, namby-pamby, killjoy Jewish-Christian morality which is the supreme negation of the Will for Power and which for centuries has made humanity spiritually impotent and sterile. Jewish-Christian ethics is a “slave-morality.” It is the work of creatures too weak to face life as it is, too fearful of it to fight it, too feeble to enjoy it, and too spiritually flabby to work out their own salvation from its terrors and its dangers. It has preached and praised a mawkish humility, meekness, turning of the other cheek, pity, gentleness and loving kindness. It has denounced pleasure and enjoyment. It has discouraged and persecuted freedom of thought, action, and art, and all sane, robust and liberal living. And to “justify” its pusillanimous precepts and practices it invented the illusions of sin and hell and future rewards and punishments meted out by the hands and according to the standards of a puritanical God.

Such ethics is founded on the *resentment* the weak feel at any exhibition of powers they themselves do not possess. It is designed to

keep the strong and the superior under their thumb and at their level. In fact, it was invented by the down-trodden Jews, who had in some way to compensate for their inability to withstand their enemies, and could imagine none better than that of calling them bad names and pretending to themselves that the superior qualities of their conquerors were sinful. This method of justifying weakness by vituperating strength was imported from the Old Testament into the New by Paul, who was afraid of himself, of the natural man, and of the natural world, and therefore had a holy horror of them all.

The Greatness of Christ. Christ, in Nietzsche's opinion, was not responsible for Christianity and its degradation of man. These were the work of Paul. Christ was strong, not a weakling. He neither feared nor resented the actualities of existence, human and cosmic, as did Paul and the Jews. He was one of the great tragic heroes of the human drama, who faced the terror of the universe and the tragedy of human life without rancor, without whining and without cringing, and with a triumphant serenity born of a profound and mystical sense of being at home in, akin to, and at one with all existence as it is.

Indeed, Christ now became for Nietzsche, along with Dionysus and Apollo, a name and a symbol for something eternal and universal. Humanity at its highest had effected in the Greeks a fusion of the Dionysiac with the Apolline, and for that matter with the Socratic. It had felt and examined the Will for Power, and in its thinking, its conduct, and its works of art, it had faced and dealt with the real world. In the Superman this fusion of exuberant emotion and passion with intellectual clarity, ethical sanity, and artistic honesty, would return with the added magnificence of a fusion with the Christlike. The new Dionysus and the Christ would rise together triumphant over the death both had suffered at the hands of Christianity and of Graeco-Roman decadence. There would be a glorious resurrection of the will and the power to live more fully and richly and joyously, and with greater heroism and tragic grandeur than ever man had done. And Christ's profound sense of oneness with the whole universe, a sense that embraced and transcended human good and evil, would become the universal heritage of the new race.

"The Transmutation of all Values" and the "Twilight of the Gods." This double resurrection will be accompanied by a "transmutation of all values" whose portents will shake the world. All the illusions and the self-deceptions by which the weak have been living, and the standards and institutions and ways of life expressive of these pretenses, will

be destroyed. And there will be violence and bloodshed fomented by the weak.

In this tremendous "Twilight of the Gods," the Christian god will at last meet his doom. In creating him to sanctify the negation of the Will for Power, man created a god who has slain humanity. Now man must arise and kill the god who killed him. A new god, born of the Will for Power, and cradled and fostered by its enormous forces, conflicts, and tensions, must be brought into being—a god who accepts, as it were, full responsibility for all that is, and reinstates as an integral and accepted part of the Real everything that the Jewish-Christian god was forever denouncing or forgiving, or seeking to wash his hands of.

Beyond Good and Evil. This god, like his creator, the Superman, will be "beyond good and evil." For the Superman will find nowhere in the whole length or breadth of existence—not even in the tragic destiny the universe has allotted him—anything to fear, anything to hate, anything to pity, anything to forgive, anything to vituperate, anything to justify, anything to reject as alien to himself. In him Power conscious of itself will have embraced and been embraced by the entire complex of cosmic Powers, from which it sprang, from which it has been so long estranged, and to which it has at last come home. Of the exultation of the Superman in identifying the whole of himself with the whole of existence as it is, in all its terrible and inhuman majesty, the new god will be the expression and the symbol.

Nietzsche attracted at once a large following. Also, at the present moment he seems to be pre-eminent among the very few philosophers since Schopenhauer whose prestige has increased with the passage of time. It should be noted that the Nazi-Fascist movement has publicly adopted him as its official philosopher, and Hitler once made a pious pilgrimage to the house in Weimar where Nietzsche died, and was there solemnly received by his sister. This is not surprising, since certain of his ideas can be so construed as to lend themselves to the support and justification of the Nazi-Fascist ideology. For instance, his glorification of the Will for Power as the sum and substance of the universe; his praise of strength and virility as the essence of human virtue; his insistence upon the decadent character of the Christian cult of meekness and weakness and upon its destructive influence on western culture; his appeal for the regeneration of western society by liberating the Will for Power from its bondage to Christian "slave-morality"; and his prophecy of the coming of the Superman in whom

the Will for Power will be given free play:—all these can easily be turned into grist for the Nazi-Fascist mill.

But it can also be argued that such grist can be obtained only by lifting passages and portions of Nietzsche's teaching from the general context of his thought, and deliberately ignoring others, and by perverting the general character and trend of his philosophy in the interests of wishful thinking and to suit special needs. For he can be quoted in condemnation of such fundamental Nazi-Fascist tenets as anti-Semitism, the superiority of any one race over all others, and the dominance of the individual by the state. Furthermore, Nietzsche's concept of the Will for Power is metaphysical and ethical rather than physical and political in its nature and implications, bound up as it is with his view that the Real is a complex of energies, activities and tensions. And the human manifestation of this Will in the strength of the strong man here and now and in that of the Superman in times to come, lies in the possession and exercise, not of superior brute force, but of superior moral stamina to face and to embrace exultantly, without fear, prevarication or hypocrisy, the universe as it is in all its sublime indifference to human good and evil. Of the possession and exercise of this inward Will for Power the great virtues of the strong man and the Superman—generosity and magnanimity—are the outward and visible signs in the realm of human relations.

All in all, then, it might seem that for every passage from Nietzsche which the Nazis and Fascists can quote in their favor, another can be cited which rebukes them. And it is at least an open question whether their ideology is not discredited rather than supported by Nietzsche's philosophy as a whole.

Chapter XXVI

IDEALISM IN THE UNITED STATES

I. SCHOLASTIC CHARACTER OF EARLY AMERICAN PHILOSOPHY

Philosophy the Handmaid of Theology. The appearance of American philosophy on the scene dates roughly from 1850. To be sure, a century and a half earlier, America had brought forth in the theologian Jonathan Edwards (1703-1758) an extraordinarily keen and profound philosophic mind. His fame rests largely upon his essay on the freedom of the will, which is one of the most brilliant and subtle works of metaphysical argument that the New World has so far produced.

Again, we must not forget political philosophers, like Thomas Jefferson, who drank deeply of the inspiration of the French Enlightenment.

Still, Jefferson added nothing to what the French had already said, and Edwards belongs to the history of theology rather than of philosophy. For the first half of the nineteenth century, moreover, philosophy in America was in the main the handmaid of Christian theology, much as it had been in the Middle Ages. Its history and teachings were for the most part expounded by the clergy, and were invoked by the theologians to give rational support to theological views. Thinking that led to conclusions at variance with revelation as the orthodox construed it would not have been tolerated for an instant. Trials for heresy, both in faith and in morals, were frequent, and the condemned were put to social, if not to physical, torture. In a word, such early American philosophy as existed was largely Scholastic in its outlook and temper.

The Rise of Unitarianism. Again, in America, as at the end of the medieval period, it was a revolt and a reformation within the Christian fold itself that helped prepare the way for the liberation of philosophy from ecclesiastical domination. Just as the authority of the Roman Church had been defied by Luther and Calvin, so evangelical Christianity in New England was challenged by a protesting Unitarian movement.

In the case of this lesser, as of the greater Reformation, the con-

tribution to the enfranchisement of philosophy was indirect. The rise and spread of the Unitarian movement made unorthodox and comparatively free thinking in religious matters (though not in ethical) socially safe, comfortable, respectable, and, in New England at least, aristocratic. Thus an atmosphere was created favorable to the eventual escape of philosophic speculation from all theological restrictions whatsoever, and to the restoration of free and independent investigation and discussion of the nature of the Real.

II. THE TRANSCENDENTALISTS

Influence of European Thought. The philosophy impressed into the service of theology during the "Scholastic" period in America had been mostly classical and British. To this we should add the somewhat negative contributions, so far as Christian orthodoxy was concerned, of the French Enlightenment. The first half of the nineteenth century, however, saw new currents pouring in from Comte and Cousin in France, from Hamilton and Mill in Great Britain, and from the recently discovered Kant and the German idealists, of whom American scholars studying at Göttingen in the early years of the century brought back first-hand reports, and of whose works translations now began to appear. Also, acquaintance with the work of Coleridge, who introduced the British to German thought, contributed to American knowledge of Kantian and post-Kantian ideas. The new philosophic vistas thus opened enlightened still further the liberalizing, Unitarian movement. They also inspired in part the famous "transcendental" group at Concord, which numbered among its members Emerson, Thoreau, Bronson Alcott, Margaret Fuller, and other New England worthies. Of these Emerson (1803-1882) was the most eminent. Emerson had only the vaguest of philosophic systems, and in it various influences lay confused. He had been dosed with Locke and Berkeley and Hume at *Harvard*, disliked their empiricism, and found them dull. He had sought relief at the Unitarian fount, which he found too chilly for his stomach. With the German philosophers, he was conversant almost entirely through Coleridge, but what he knew of them suited better his romantic constitution. Through reading the Cambridge Platonists he had discovered Plato, in whom, more than in any other, he found spiritual healing. But what attracted him in Plato was not so much the intellectual as the emotional and mystical strain seized upon and emphasized by the Neo-Platonists.

Emerson and the Over-Soul. These influences, positive and negative, were combined in his point of view. Not reason but intuition is for Emerson the key to the nature of the Real. Nature is the outer appearance and symbol of an inner spiritual fact. This inner spiritual essence, creating and supporting all things, of which man's mind is part, is the Over-Soul. Within the universal mind nature lies as a harmonious whole, the parts of which are all interrelated so as to express the divine purpose and to subserve man, the supreme manifestation of deity. Science and religion—and Emerson was well read in the science of the day—alike testify to the glory of God. Both interpret the divine ideas, innate in the human mind, of which all experience is the reminiscence. To enter the kingdom of heaven we must become like little children, and spontaneously and trustfully accept the revelation of which nature is the vehicle.

III. NEO-HEGELIANISM IN AMERICA

Harris and the St. Louis School. In 1867, two years after Stirling had published his *Secret of Hegel* in England, Hegelianism was introduced into America by W. T. Harris (1835-1909) and other members of the "St. Louis school." Hitherto, we may remember, acquaintance with German thought had been, thanks to Coleridge, mainly acquaintance with Schelling. Harris had himself been instructed in Hegelian doctrines by Brockmeyer, a German immigrant under whose direction the *Logic* had been imported and studied by an enthused group. In 1867, the *Journal of Speculative Philosophy* was founded by Harris, and devoted to spreading the new gospel. Under its auspices, also, translations not only of Hegel, but of the other German philosophers were made. Kant, also, was read in the original. Upon this main stock of Hegelianism were grafted ideas contributed by the Concord Transcendentalists, and the men of St. Louis, in their turn, helped introduce Hegelianism to Concord. Bronson Alcott lectured in the West on Platonism and Neo-Platonism, Harris in Concord on ideas derived from the Germans. So it was that St. Louis became for the moment the philosophic center of America and the conveyor in particular of the German message.

The "New Thought" Movement. German "transcendental" influence had interesting ramifications. At the time of the Italian Renaissance, we may remember, the doctrine, derived from Neo-Platonism, that nature veiled the face of God and symbolically revealed his essence had given rise to a belief in occult influences and in the hidden exist-

ence in man of an ability to exercise occult powers. This belief expressed itself in astrology and alchemy and magic rites for summoning spirits and raising the dead. Now, in the same way, the Transcendentalists' assertion that the universe is a symbol, and that the interrelation and the interaction of its parts and events rest upon a cosmic hidden sympathy, fostered once more a sense of occult forces—a sense intensified by the phenomena of mental suggestion, and by the study and practice of hypnotism, or "mesmerism," as it was called, which were being introduced from France. The mind, it might seem, had in reserve mysterious powers over the body and the physical world, far in excess of those which it ordinarily wielded, and minds might, even at a distance, project upon one another through occult channels curses or blessings, health or disease.

Itinerant hypnotists and mental healers engaged the public attention. Of the latter, Quimby was the most famous; and justly so, for he had developed from observations of his patients a really scientific theory of the nature of hypnosis. It was, moreover, his destiny to be the forerunner of the founder of Christian Science. He had already preached the fundamental ideas upon which Mrs. Eddy seized, that all is mind and all is good. It has also been suggested that Mrs. Eddy may well have read one of the early American books on Hegel. In any case the whole New Thought movement, including Christian Science, is in its philosophy a ramification, in part at least, of Neo-Hegelianism. So, too, the "transcendental" atmosphere proved congenial to revivals of Oriental mysticism and to the rise and spread of theosophy.

IV. INFLUENCE OF EVOLUTION AND NATURALISM

But Hegelianism and Transcendentalism had their opponents. The influence of Comte and Mill and of their metaphysical skepticism was also felt. The doctrine of evolution aroused much the same excitement in America as it did in England. The scientists themselves were at odds with one another. The great biologist and geologist Louis Agassiz (1807-1873) rejected the doctrine and held that species were immutable. The eminent botanist Asa Gray (1810-1888) accepted and defended it, as did the geologist James D. Dana (1813-1895). Meantime, Henry Draper (1811-1882) advocated naturalism, and rebuked theology for the obstructions it had from the beginning put in the path of scientific progress.

Spencer's attempt to construct a philosophy of evolution also won

many admirers and adherents, and John Fiske (1842-1901) in his *Outline of Cosmic Philosophy* (1874) gave a popular exposition of the Spencerian system.

V. ROYCE

In 1882 a young Californian, lately graduated from Johns Hopkins at Baltimore, came to Harvard to teach philosophy. He was Josiah Royce (1855-1916), in whom American Hegelianism bore its ripest fruit.

The Object of Experience—More Experience. In *The World and the Individual* (1900-1901) Royce expounded the essence of his system. He built up his metaphysics in his own way, and came to conclusions that differed in many respects from the views of the great British Hegelians, Green and Bradley. Experience, in which we must begin our quest for Reality, is not, he tells us, self-contained. It is experience of something more than what is given in its content. The question now becomes—what is this something more? The object of experience cannot be independent of experience, since in that case experience could not be of it. Nor can experience simply return upon itself and be of itself, since such experience would be meaningless. It would not signify anything. Finally, we cannot do as Mill and the other British empiricists did, and locate that to which experience refers in the mere *possibility* of more experience. For how can my experience be of a mere possibility? I cannot experience a *possibility*. I can only experience actual data.

These difficulties leave us no alternative but the theory that the object of any particular experience is more experience. Every item of experience, every idea, means, intends, yearns, and gropes for a wider experience in which its meaning shall be fulfilled and it itself shall be made intelligible. The object of an idea, then, is that which would realize the idea's significance.

The Nature of the Absolute Experience. The significance of an idea, however, rolls away from it in an ever-widening circumference of meaning. Nothing short of an absolute and infinite experience embracing the totality of existence can entirely exhaust what an idea intends and tries to say. There must, then, exist an absolute mind to which the secret lying at the heart of every experience is laid bare, and by which it is understood. In that infinite understanding the meanings of all things conspire to give a final, single, and complete meaning to the Real, in which all intentions are fulfilled, all questions answered, all searchings pacified.

This overarching Absolute contains us and all our experiences, but it contains much more besides. It comprehends the infinite content of all time and space as a single completed fact. All that is, all that was, and all that shall be are present to it in their entirety, just as the successive notes of some haunting musical phrase pass, and at the same time linger as a whole. By it all our errors are understood and thereby corrected. So, too, sin and evil find their place in it—not as partial aspects of a wider good, but as things with which the Absolute struggles, even as we struggle, and over which it triumphs even when we do not. We ourselves, though our minds are parts of the Absolute, are not thereby deprived of real individuality and uniqueness. Somehow we remain separate selves and personalities, in spite of our partial nature.

The Self-Repetitive Character of the Absolute Experience. All this infinite wealth of experience—the magnificence of the world-process, the splendor of human history, all selves, all sensations, all passions, all emotions, all loves and hates, all aspirations and disappointments, all ecstasy, all suffering, all failure, all sin—are experienced and understood and brought within the focus of a single meaning by the absolute mind. But this is not all. The Absolute not only knows the infinite collection of experiences, which constitute the totality of existence and the content of its mind, but, since that collection is grasped as a single completed fact, it knows its own knowledge of it, and so on *ad infinitum*. It knows, and knows that it knows, and knows that it knows that it knows, etc., thus multiplying without end the initial magnificence of its vision, just as reflecting mirrors repeat indefinitely the same scene.

But, even this piling of infinity upon infinity does not destroy the ultimate completeness and the finished and perfected character of the Absolute's life. Contemporary mathematics, with its theories of transfinite numbers, suggested the possibility that an infinite collection like the ordinary ordinal series, 1, 2, 3, etc., might, for certain purposes and under certain conditions, be regarded as a completed whole and made the number 1, or ω as Cantor called it, of a new infinite, *transfinite* series of a higher order. Royce seized upon this mathematical theory as a means for overcoming the difficulties that beset the infinitely self-repeating character of the Absolute's self-consciousness. Just as the infinite ordinal series may be thought of as a completed unit, so the infinite series of acts of reflection with which the Absolute knows itself may be regarded as closed, and therefore as consistent with the all-embracing, finished and perfected nature of the absolute mind. The

Absolute not only sees the infinite content of all space and time as a single unified, finished experience. Its infinitely repeated act of being conscious that it is conscious of that experience is also seen as a completed fact of perfect self-consciousness.

In his later years Royce gave more and more attention to moral and social problems. Since the significance of the life of the individual infinitely transcends his individuality, goodness lies in his self-identification with this larger meaning. He must be loyal to the aims and purposes in which he finds his wider significance expressed. Above all he must be loyal to the principle of loyalty in itself. For loyalty is the supreme principle—the categorical imperative, as it were, of the moral life. By obedience to its call, we help realize the meaning we have in and for the life of the Absolute.¹

VI. HOWISON

Pluralistic vs. Monistic Idealism. The monistic, Hegelian idealism of Royce may have dominated the idealistic camp, but it by no means domineered over it. At the University of California George Howison (1834-1916) expressed in no uncertain terms his dissatisfaction with Royce's conclusions, and developed in opposition to them a pluralistic idealism of the Berkeleian type. He contended that Royce, for all his assertions to the contrary, failed to save the reality of human individuals, and reduced them to mere aspects of the Absolute. Furthermore—and here Howison agreed with Fichte and disagreed with Lotze—a plurality of selves is an indispensable condition of self-consciousness. No ego without an alter. If I am I, I am not you—to and from all eternity.

Moreover, moral relations can only obtain in a society of real, independent selves, each one of which is endowed with freedom and self-determination. To reduce these selves to parts of the life of an Absolute, is to deprive them of their liberty, since their wills become so many expressions of one and the same absolute will, just as their consciousness of themselves becomes an expression of one and the same absolute consciousness. Absolute idealism, then, in destroying the possibility of the interaction of independent free wills strikes at the very root of a moral order.

The Real a Society of Moral Personalities. To keep the Real moral and self-conscious we must suppose it to be composed of uncreated and indestructible moral personalities in social relations with one an-

¹ "Philosophy of Loyalty" in *Hope of the Great Community* (1916).

other. These selves are bound together in a common subservience to the same ideal. This ideal of completely perfected self-hood endowed with perfect wisdom and perfect goodness is enacted in a divine self. God is one person among others. He does not create the other selves. He is not their efficient cause. They are uncreated, uncaused, and eternal. But, actually enacting as he does all that they would like to be, he holds out to them a vision of achieved perfection, which moves them, after the fashion of Aristotle's God, as the beloved moves the lover. By the power of attraction and by final causation he binds them to one another and to himself in a common allegiance to his supreme perfection.

These views Howison first brought forward in a public debate with Royce in 1895 at the University of California. He expressed them more completely in his *Limits of Evolution, etc.* (1901). A similar tendency to save and exalt the individual self was displayed by Thomas Davidson (1840-1900).

VII. CARR

A pluralism of a somewhat different type was also advanced by H. Wildon Carr (1857-1931) of London University and the University of Southern California, who was greatly influenced both by Leibnitz and by Bergson. Reality for him is composed of non-spatial, non-temporal monads, which are active, living and conscious. Spatial, temporal and physical phenomena exist only as the experience of these monads. The monads are, moreover, windowless. We can never break through the periphery of our own sensation and knowledge. Hence we can never experience, in perception or conception, a reality existing independent of ourselves. I am conscious only of my perceptions and ideas. My perceptions and ideas are not a consciousness of something existing beyond and independently of them.

However, the experience within which each monad is necessarily confined *means* a common and external world. Within my private world I find and deal with experiences that the very activity and nature of my consciousness forces me to treat as other people and outside objects. But so dealing with my conscious content means *living*. It does not mean sitting by and looking on. It is only in so far as I am an *actor* that my inner world assumes an outer and a social significance. The moment that I try to stand off from it and survey and analyze and reflect upon it, I devitalize everything in it that means and represents other persons and other things, and reduce it to *my* conscious content and nothing more. In other words, if my knowledge, whose

only object is my own experience, is to represent to me an external world it cannot be purely contemplative and descriptive. It must be infused with warmth and vitality and activity. It must be a *behaving towards* and a *living with*.

Away then with matter and with essences, with subsistence and with existence, and with everything else that is static and frozen. Both to *subsist* as a Platonic Idea and to *exist* as a concrete substance mean to be changelessly and eternally what one is. Existence and subsistence are alike epitaphs. They are conditions of death, not of life. Reality is living. Every monad of which it is composed is pulsing, changing, evolving. *Real* things neither subsist nor exist. They *become*.

VIII. PERSONALISM

The Growth of Personalistic Thought. Personalism is perhaps most conveniently regarded and treated in connection with American philosophy. To be sure, it had a long period of European incubation, and many influences contributed to its making. Philosophic movements of different sorts and motivations had at different times attributed different degrees of social, moral, epistemological and metaphysical importance to the individual human being, and had thereby adumbrated the fundamental importance in the scheme of things assigned him by contemporary personalistic thought. Also, the words "personalism" and "personalistic" had been used by some European neo-Kantian, idealistic thinkers to characterize the emphasis their systems gave to the self-conscious, volitional, moral, social, creative and active aspects of the human mind. And the French philosopher Renouvier adopted the term "personalism" to express the gist of his philosophic views.

Nevertheless, it was in the United States that "personalistic" doctrine first emerged as a definitely organized school of thought whose adherents, however much they might differ on some points, were all in communion with one another with respect to certain fundamental ideas, and were as one in adopting "personalism" as their common name. The word and the philosophic opinions it stands for were first introduced into America by B. P. Bowne (1847-1910), long professor at Boston University.

Bowne. Bowne emphasizes free, moral, and responsible personality as the central fact and prime constituent of the Real. Persons are unique. They are, at least when they are once started, self-existent and self-supporting. The supreme reality of the self-conscious person is revealed immediately in experience. Personality is creative, produces

experience, and molds it into the categories which give it substantial, causal, self-identical and unified form. At the same time, what we call the external world is not a figment of the finite mind. It exists independent and apart from us as the rational experience of a divine mind who creates and sustains it, and thinks it in the categories that we, also, discover within ourselves. The Real, then, consists of a supreme person surrounded by other individual personalities, with whom, as in the Berkeleian system, the experience we call nature is his method of communication. The finite persons are caused by him, but are distinct from him and from one another. They are free and morally responsible, and their deepest relations both with him and with one another are moral relations.

Belief in God is above all demanded, as Kant maintained, by the exigencies of the practical and moral life. Without God morality would be meaningless, and our practical needs would remain without response. Christian dogma has its basis in these needs and may therefore be held as true. Still, Bowne did not insist on too great unanimity in the statement and interpretation of it. On the contrary, if religion is to be kept vital and abreast of the times, Christian dogma requires new expressions in the language and phraseology of the religious experience of the day.

The metaphysical hypotheses set forth by Bowne are accepted in the main, with some modifications, variations, subtractions, and additions, by most members of the contemporary personalistic movement. But personalism is still so elastic in its scope, and so generous in claiming as its own so many thinkers, not only modern but scattered throughout the history of philosophy as far back as the fifth century B.C., that it is difficult to deal even with its contemporary aspects in a way satisfactory to all of its present-day adherents.

Emphasis on the Personal, Creative, Free, and Moral Essence of Mental Activity. However, what would seem to distinguish personalism from other variants of pluralistic idealism is, in the first place, the overwhelming importance it attributes to the *moral* and *personal* characteristics and activities of the individual centers of consciousness, which, with their experiences, constitute Reality. Since these characteristics and the values associated with them are the *highest* properties of consciousness, they are therefore also the *deepest*, and indicate most clearly the nature of the Real. Reality, then, is essentially and primarily a plurality of *personal* experiences.

Again, personalism is insistent upon the continuously *creative* nature of the activities of the persons constituting the Real. God, the supreme

person, and the origin of all existence, is forever originating the experience we call the external world. This he continuously imparts to the finite centers he creates and supports, but they, in their turn, as continuously re-interpret, re-mold, and, in a sense, re-create it as they receive it from him and act upon it. Besides thus co-operating with God in the production of the external experience shared by them all in common, each person is also the creator of a wealth of private and unique experience of his own.

Another point emphasized by personalism is the *freedom* of the creative activity and behavior of each individual center of consciousness. Each person is the sole originator of his own activities and the sole molder of his own life, and he, and he alone, is ultimately responsible for what he does with himself and the character he develops.

Personality and an Essentially "Moral" Order. Since the highest values displayed by personal existence are *moral* values, we may infer that Reality is as profoundly moral as it is personal. The universe, we may be sure, is founded on moral principles, and the world-process is governed by a moral purpose and aimed at the realization of a moral ideal. This ideal is the *free* production, on the part of each finite center, of moral character expressed in a life lived in accordance with the moral law. Moral laws are as universal and inexorable as so-called natural laws, and their defiance is as inevitably followed by disaster as is defiance of the operations of nature. Since the freedom necessary to the possession of moral responsibility and the production of moral character may be expressed in disobedience as well as obedience to the moral law, and since suffering in its various forms is incidental and even necessary to the highest development of the individual, the existence of evil is compatible with the fundamentally ethical and teleological nature of Reality.

Persons are social by nature, and the higher and deeper aspects of morality rest upon social relations. Hence a personal Reality will be a social system, and the strongest ties binding the finite centers both to one another and to God will be social in character. But such ties are not bonds. They in no wise destroy or impair the unique value of each separate person, and in no wise restrain him from the maximum of individual development and expression of his particular and unique moral nature. Indeed, the production of the maximum wealth of value possible to each individual is God's purpose with regard to man.

Chapter XXVII

PRAGMATISM

I. JAMES

The Development of the Pragmatic Point of View. Meantime, a philosophy was appearing that attracted immediate and widespread attention, and that has established itself as the leading philosophic movement of the first third of the present century. William James (1842-1910), doctor, psychologist, and philosopher, who taught at Harvard from 1880 to 1907, was founding *pragmatism*. His inspiration, he tells us, he drew largely from Charles Peirce (1839-1914), a philosopher whose light was hidden beneath the bushel of a retired private life, and whose eminence is only just beginning to be publicly recognized. To Peirce we owe the beginnings of symbolic logic, of the *tychistic* theory that real *chance* plays an important part in the occurrence of events, and of the view that the world-process is a gradual shaking down of a disorderly, undetermined and haphazard chaos into a crystallized, orderly system.

To understand pragmatism, we ought, however, to go further back than Peirce's influence on James. Back in the sixties, Lange, it will be recollected, had distinguished judgments of truth from judgments of value. Although, he said, we could not make valid comparisons of different religions in point of their truth, we could properly compare them so far as their satisfactoriness was concerned. A little later Mach, and then Pearson, had pointed out that scientific concepts, or in other words, scientific *truths* were not revelations of entities existing beyond and independent of experience, but were simply *conceptual shorthands* for summing up and organizing in brief, convenient and simple shape great numbers of experienced events and objects. These shorthands were truer in so far as they were better for the purposes of the scientist. In a word their truth lay in their usefulness. So long as a theory was useful, it remained true. The moment it outlived its usefulness, and some more convenient and simple theory was found to do its job, it became false. Truth was itself a value.

Renouvier also was insisting that the scientific interest could not be

divorced from other human interests, and that therefore the truth of a theory lay in the general satisfaction it gave to the whole of human nature, including moral and religious demands. And Peirce, among other things, had suggested that even the principles and laws of logic, which might seem at first sight immutable, were really changing, and had been evolved and were evolving according to the principle of *utility*. Plainly there had been amassed a number of suggestions which called for organization in a new philosophy. This philosophy James was the first to conceive and to enunciate.

James's View of Experience. James, like the British Empiricists, founds his theory of knowledge upon the revelations of sense-experience. But his study of consciousness leads him to far different conclusions. For one thing, it permits him, as we shall see in a moment, to have a metaphysics. For another, it leads him to reject altogether the view that the content of experience is atomic in nature. Experience is not made up of separable, discrete data fitted together like the bits of a mosaic into a pattern from which the relations between the component parts of the pictures they present can be abstracted and regarded separately. On the contrary, it is a flowing, continuous affair in which there are no cracks and joints, either spatial or temporal. Things shade and merge into one another both in space and time. Nothing is self-contained. Everything tends to spill over. To be sure, experience is continually curdling and thickening into what we call things or substances, but these curdled spots melt and run at the edges into a liquid "transitive" stuff, which thickens immediately into some new "substantive" aspect. The content of consciousness then, though infinitely multiple and varied, is *one*, not many as the earlier empiricists taught.

If we view experience as an affair of this sort, the old, hidebound distinctions between matter and form, substance and relation and activity, and the like, all collapse and are dissolved in the stream of consciousness. Sense data cannot be precipitated from the relations in which they occur and from the activities in which they are engaged. They are *given* with a "fringe" of prepositions relating them on all sides, and they are given *doing* something. They are immediately and fundamentally *in relation* to one another—of, by, with, beside, before, after, passing into and out of, one another. They can no more be torn apart from their relations than an octopus can be torn away from its tentacles. Strip a thing of its relations and you have nothing left.

Effect of Attention and Volition upon Experience. But why does experience curdle in spots? Why is it thicker and more solid here,

thinner and more running there? How can it "stay put" and constitute a world, and why should it constitute this world rather than that? How does it give rise to "ideas" about itself? And why should we call some of these ideas "true," and others "false"? Such are some of the questions we must now answer.

James's reply is that consciousness displays what we call "interest" and "attention." It is volitional as well as sensory. It not only feels but it likes some of its feelings, dislikes others. It selects, attends to, and dwells upon a part of its content; rejects, neglects, pushes away, and forgets the rest. What is selected and attended to is made real and vital. What is rejected and pushed away thereby becomes relatively unimportant and unreal. The world of things, therefore, is largely of our own making.

But the content of consciousness is not exhausted by data immediately present to it. Besides the experience with which we are here and now *acquainted*, we entertain "ideas" which memory and imagination enable us to draw from sense perceptions. These "ideas" refer beyond what is directly present, and afford us indirect *knowledge about* experience that is past and experience that is yet to come.

The same volitional, selective influences as govern the attention we give to our sensations, also operate in connection with our ideas. Some ideas engage our attention, monopolize the footlights, dominate the stage, and make the rest of the mental cast insignificant by comparison. Moreover, since every idea, because of its active, transitive side, is a motor-idea and discharges itself in action, unless inhibited by other ideas, the concepts that dominate our thought are also the concepts that inspire our behavior.

Truth an Expression of Purpose. But by what principle is the selective activity of consciousness motivated? By the total *purpose* of the consciousness in question, James answers. We attend to and promote what gives our total nature, including our emotions and yearnings and aspirations, the greatest satisfaction. The ideas that interest us are *previews* of situations that have bearing upon the achievement of that satisfaction. They are not mere memories of situations that are dead and gone. When we *think*, we are not dully looking over photographs of the past. We are trying to paint a portrait of *future* experiences that will answer to our desires and fulfill our total purpose. These experiences are the "objects" to which ideas are supposed to refer.

Furthermore, and here we come to James's *pragmatic* view of the nature of truth, the "~~feel~~" of *truth* which some ideas have is simply

the feeling that they do anticipate the desired and satisfying experience. They "correspond" to their objects by producing them. Conversely, the falsity of an idea is the feeling that the experience it pictures is undesirable or unlikely to occur. Since true ideas are regarded as forecasts of agreeable and satisfying experiences, they are in themselves agreeable and satisfactory to entertain. Nevertheless, the proof of the pudding is in the eating. For the idea to be truly true, it must "work" not merely by being pleasing in itself, but by anticipating or producing the satisfactory experiences it promises. As long as it continues to "work" in this way, it remains true. When it ceases to yield satisfactory results and no longer "works," it becomes false, and goes into the scrapbasket of outworn creeds, outgrown hypotheses, and discredited theories.

Plainly, then, for James, *thinking* is secondary to *willing*. Idea reflects impulse, and reflects it as it wants to be reflected. The will determines how and what we shall think. Ideas, in so far as they satisfy or disappoint the expectations of the will, envisage truth or error. The truth of an idea has nothing to do with anything outside experience, or even with any permanent form and constitution of experience. It denotes simply that the idea is working satisfactorily at the moment as a means of getting out of experience what we now *want*. To be true an idea must continually *come* true.

Experience and Reality. How much metaphysics will such a theory of the nature of knowledge and truth enable us to get out of experience? It will certainly not permit us to look outside experience for metaphysical entities. We have no right to assume anything existing *beneath* consciousness. Transcendental unities of apperception, ego, souls, spiritual substances, are all out of the picture. They are unnecessary now that it has been shown that relations are not introduced from the outside into the manifold of sense-experience, but are part and parcel of it. Nor has self-consciousness any need of external support. It, too, is simply there in the stream of consciousness, floating as it were upon its surface, and handed on, along with the other content, from one moment to another. The continuous, unbroken, flowing character of all experience is sufficient to account for its continuity, without invoking the intervention of a transcendent self.

In all these matters, James is, as he himself terms it, "a radical empiricist." Reality is nothing but experience. It has, we might almost say, no third dimension of thickness, such as the "transcendental" philosophers and the old-school metaphysicians attributed to it. It only a flowing, extended *surface*.

The Fringed, "Open and Close" Nature of Experience. But on this surface, and in the two dimensions of length and breadth, there may exist all that we need. Among the ideas that "work" are those that indicate the existence of a plurality of streams of consciousness and of other selves like our own. Practically and pragmatically, we find ourselves dealing with a world of fellow-men, with whom we are in experienced companionable and moral relations. Furthermore, the spread of any individual's consciousness is a curious affair. It expands and contracts, it has tentacles and fringes. It is subject to all the baffling occurrences of abnormal psychology. It opens upon extraordinary vistas, sometimes revealed in split personality, in hypnotism, in telepathy, in clairvoyance, and in the "metapsychical" phenomena investigated by "psychical research."

This "open and close" peculiarity of the field of consciousness should be enough to convince us that our individual streams of experience are really currents in a great sea of more experience that encompasses us on every side. Ordinarily and normally they flow within the limits of what we call prosaic, everyday consciousness. But on occasions they fan out over the surface of the "more," and become confluent with new waters; only, however, to shrink again to their "normal" volume.

Religious Experience vs. Marginal Nature. There is, however, one sense of contact with the "more" that has been usual and well-nigh universal throughout human history. Man has always and everywhere had *religious experience*. He has felt around and about his consciousness the presence of another experience, akin to his own, sympathetic to his aspirations, fighting with him against evil in the service of the good, and inexhaustibly able and willing to encourage and comfort him. Upon this larger presence he is forever falling back in communion and in prayer. Nor does it ever fail him. Here is an experience that escapes and passes beyond the ordinary kind of data given in connection with the senses, and that yet remains *experience*.

It is in exploring and interpreting this "more" that metaphysical speculation is justifiable and of positive value. In dealing with it we must be guided by the same method as inspired our trafficking with sensory experience. In the one case as in the other, the test of the truth of an idea will lie in how it *works*. If it prefigures the occurrence of experience that brings to our whole nature comfort and happiness and peace, we may regard it as true. Judged by pragmatic standards, the most soul-satisfying and therefore the *truest* way of interpreting religious experience is to suppose it to come from another personal consciousness like our own, with which we commune as a friend, who

loves us and desires to help us. In other words, theism best stands the pragmatic test of truth.

Nature of the God of Religious Experience. But not every kind of theism. For the theism that conceives God as infinite and omnipotent James has no use. If God can do as he pleases, and has been pleased to create the kind of world we live in, it is impossible to conceive him as a moral and friendly being. No God who is worth his salt can be good, as we understand goodness, if he so much as tolerates our universe as it stands, not to speak of creating it deliberately by fiat. Far from satisfying him, it must disgust and pain him beyond words. No humane God can be truly happy, James says somewhere, as long as a single cockroach suffers from an unrequited love.

No, the useful God, the God we need and turn to, must be a God who is limited and thwarted, who suffers, and fights, and does the best he can, like ourselves. Only with such a God can we cooperate in any intelligible sense of the word. If the world as it stands is the creation of the divine will and is good in the divine sight, there can be no such thing as helping God better it, since it completely fulfills his purpose and manifests his power, as it is. Nay more, there is no room for real freedom, real novelty, and real experiment in such a world. The universe is a *bloc* universe, achieved, finished, and closed, in the very act of its creation.

The Universe Tychistic. We must therefore conceive God and ourselves as fighting shoulder to shoulder to perfect the universe. The odds against the success of our common task are heavy. God must contend with the stubbornness of our free wills, which by refusing to cooperate may retard or even wreck the working out of his scheme. He and we have also to reckon with a factor of pure *chance* in the universe. James, we see, here agrees with the *tychistic* view advanced by Peirce. Plan as we may, we have always to take into account an unpredictable element in things, which may upset and defeat our calculations at any moment. The world-process, in a word, is a gamble, involving an enormous stake and tremendous risks. But the risks are worth taking. The game is worth playing. It is exciting in itself, and we are playing for a prize beside which all the material wealth of the world is as nothing. If we and our partner, God, win, we shall have won the salvation of the universe.

The Will to Believe. In a Reality so conceived we may also hope for immortality. We have, James feels, possible intimations of it in the phenomena observed and studied by psychical research. But even without them, we should be justified in believing in it because of its

pragmatic, practical value. To be sure, ideas like God and immortality can never receive the same matter-of-fact corroboration by experience, as, say, our anticipations of an eclipse or a concept like the law of gravitation. We cannot see God face to face as we can a falling apple or the moon obscuring the sun. He is too "marginal," too much on the "fringe" and in the "beyond" of our experience for that. Nevertheless, belief in him and in immortality satisfies our moral and esthetic and emotional demands. A world of which God and immortality are believed to be a part is a more livable and workable world than one from which they are excluded. We *want* to believe in them. We are happier all around if we believe in them.

Since, however, their existence is not clearly corroborated and is open to argument, we are bound to be assailed by doubts. To dispel these misgivings, we have to make an effort. We have to "will to believe," as James puts it, in a famous phrase. This "will to believe" is a vital factor in our ability to help God win the game. Disbelief in him and in the value of the game is precisely one of the things we have to fight against. It paralyzes our efforts and renders us less efficient. To be at our best and to do our best, we must unremittingly *sustain* our faith that God exists, that his game is worth playing, that the risks are worth taking, and that there is a good chance of our winning—if only we so will.

II. SCHILLER

With many of James's conclusions F. C. S. Schiller, of Corpus Christi College at Oxford and for some years professor of philosophy at the University of Southern California, was in agreement. Some of them he developed independently, in others James's influence may be seen. Like James he was interested in psychical research and in the bearing its discoveries might have on such problems as that of immortality. He also defended vigorously the concept of God as a finite, struggling, fighting being like ourselves. He was a radical empiricist—in a way even more radical than James. Also, like James, he was an indeterminist, and believed that experience harbors spontaneous and chance events, which cannot be predicted, and for which no pre-determining causes exist. He accepted the pragmatic criterion of truth. The truth of an idea for him, as for James, lay in its utility and workableness as tested by its all-round satisfactory results; not in its correspondence to any unseen order and constitution of the world. Ideas

were true as long as they enabled us to cope with experience. When they lost that power they turned false.

But Schiller, as we have just said, was even more radical than James in some respects. He dwelt upon the fact that ideas and beliefs which "work" for one man will not "work" for another. What is one man's meat is another man's poison. Every individual tends to construct out of the flow of experience, the reality, sensible and intellectual, that suits himself. He colors and interprets experience in terms of his own personal predilections and idiosyncrasies. He builds his own particular world. He almost, we might say, *creates* his special, private truth. So-called knowledge is not a registration of something already existing independently of it. It is a process of producing and building up a world congenial to the knower in question.

Experience lends itself to any and every form in which the individual creative personality cares to mold it. Hence there is no common *original* experience with a form and a cast of its own. On the contrary, there are as many experiences, as many realities, and as many truths as there are individuals. But since every individual experience, if it is to "work," must be a *social* experience in which other individuals play a part, the rough edges of our private worlds and realities get rubbed off, and certain experiences and ideas prove, as a matter of practice, to work for most individuals. In this way, a *derivative*, common experience, embodying "public" concepts workable and "true" for all alike, is built up out of the social aspects of our original private experiences.

This public truth, however, is purely pragmatic. It is only true for me as long as it works for me. When it ceases to express and satisfy my purpose it becomes false so far as I am concerned. I am then clapped into an insane asylum, or dubbed an eccentric and scorned as out of step. Sometimes, however, my truth eventually comes to "work" for other people as well as for me, gains public acceptance, and becomes common property. In that case, public opinion is reversed. I am no longer considered out of my head, as my contemporaries thought me, but a prophet far in advance of his times.

Because of the stress his system laid upon the creative aspects of individual thinking and the private and particular nature of truth, Schiller preferred to call his philosophy, not pragmatism, but *humanism*.

III. DEWEY

Ideas as Instruments of Successful Action. John Dewey (1859-), of Columbia University, agrees with James and Schiller in their radical empiricism. Thought has no object outside of experience, and no being of its own apart from experience. Thinking is not of a different order from perceiving. Ideas are anticipations of perceptions. For that matter, things are only what they are perceived to be. They exist only *as* they are experienced.

The function of thinking is not primarily to construct general images and ideas out of remembered perceptions or to anticipate in a general way general situations. Ideas are specific in character, are aroused by specific circumstances, and anticipate a particular occasion. They are practical *instruments* for dealing with each specific situation as it arises. They are *responses* to that situation, and their business is not to indulge in generalities, but to attend to it and to it alone. In so far as they prove effective *instruments* in dealing with the situation that evokes them they are true of it. If they fail to work in any particular case, we have made a *false* estimate of the situation in question.

Every case has to be met and judged on its own merits, so there can be no hard and fast, universal ways of dealing with experience, and therefore no universal truths. We live in the midst of an evolving, changing experience to which knowledge is an act of adaptation, and of adaptation to which a *true* idea is the sign. But knowledge, like experience, is in constant flux, since it involves continuous readjustment to changing circumstances, and an idea signifying adaptation at one moment may mean quite the reverse at the next.

Again, if an idea operates upon a situation with an unsteady hand, we call it an "hypothesis." It trembles with "if" and "perhaps." It is conjecture. It becomes a "fact," however, the moment that it stops shaking and gets down to working firmly and steadily for the time it continues to work.

The Social Basis of True Ideas. Upon man's social nature and the importance of his social activities in producing knowledge and truth Dewey is insistent. A great part of the environment to which knowledge is an adjustment is social in character, and the truth of an idea is correspondingly a mark of its social acceptance. The mental processes productive of social truth—in other words, productive of the body of ideas that "work" for the experiences of most people—are what we call the processes of *reason*, and express themselves in the rules of

logic. But there is nothing sacrosanct and immutable about these ways and rules of thought. What man considers reasonable and intelligible and logical at any time is the product of the collective thinking of that time. Society, which does the collective thinking, is in a state of constant development. Its relations to its natural environment change, and its individual components are ceaselessly being readjusted to one another. Hence the common instrument called social truth is experimental in character and subject to uninterrupted revision. It is being tinkered with day by day, and periodically a new model is put on the market.

The Fluidity of Truth and Good. In the same way, standards of rationality and principles of logic are what they are at a given epoch because they embody the most successful *experiments* in thinking, up to date. They have evolved because they have "worked," and they owe such authority as they possess to their instrumentality in helping us solve the problems that confront us now and here. Their "necessary" character is contingent upon their good behavior. Under new conditions and in the face of new problems they might prove ineffective and useless; in which case they would no longer be good logic but bad.

We are concerned only with the present, not with the past. Let the dead bury the dead. In any case, let not the dead hand of past truth seek to dictate what shall be true for us who belong to another generation and live in another, newer world. To be sure, many past truths are also present ones. They continue to live. But the only real life in them belongs not to their past but to their present applicability. They hold true today, not because they were good enough for our fathers, but because they happen to be still good enough for us. *We* are the only judges of what works and is true for *our* experience. Though we may hold fast to so much of our legacy of past ideas as helps us to meet our modern conditions, we must not hesitate to reject everything that no longer measures up to our needs, and that therefore, so far as we are concerned, has ceased to be true and become false.

In fine, truth must be kept pliant and supple, if it is to serve mankind. The moment it is allowed to become stiff and unyielding—as it does when it is crystallized in conventions and legalisms and moral and religious dogmas—it is no longer a help but a hindrance and a positive danger to the furtherance of human purpose. It is no longer truth; it is error. It behooves us to be vigilant in keeping truth up with the times, and in bringing it up to date, since only by being kept burnished, and rustless, and unblunted, and keen, can it always

prove instrumental in enabling us to deal with the problems of the present.

This is, to be sure, a counsel of perfection, which falls largely upon deaf ears. We none of us heed it, and in consequence are always behind the times and stagger along under a burden of ideas, inherited from the past, which no longer fit our needs and hence are false to the conditions of the day. The world, in Dewey's opinion, is a junkyard of outworn creeds of every sort, among which we still stumble.

So it is that we find him an active reformer, seeking to clear away what he considers the rubbish, and to introduce in its place the ideas that in his opinion will work under modern conditions and are therefore true of them. This advocacy of reform extends itself into many fields, social, political, economic and moral, in which he is well known for his "advanced" ideas. Furthermore, he has in some cases been able to test his views in the laboratory; most notably in connection with the education of children, whom he would teach pragmatically by leading them to find out things for themselves by experimentation, and to learn by doing.

The Uselessness of Metaphysics. Pragmatism, or *instrumentalism*, as Dewey prefers to call it, is primarily an epistemology, or theory of the nature of knowledge, and an ethics, in as much as it is also a plan for living. In metaphysical and theological problems Dewey has little interest. He would agree with Schiller and James in ruling out as useless and false any metaphysics and any theology that tried to transcend experience and to reach objects existing independently of it and incapable of being incorporated in it. Reality is for him experience and nothing else. We have to take experience as we find it. Its presence makes us want to do certain things and presents us with certain ends. But upon these ends we cannot pass value judgments. Our aims are simply *there*. They are neither good nor evil. *Values* attach themselves only to the *means* we supply to achieve our ends. Means are good or bad, desirable or undesirable, to the extent that they work in bringing to pass what we want and aim at. Whether experience is actuated by chance or is purposive, raises for Dewey a question that he believes to be unanswerable. Certainly it is not of the *bloc*, deterministic, mechanical type. It is not a shuffling over and over again of the same old cards. New cards apparently are constantly turning up in the pack.

The Privacy of Religious Experience. Finally Dewey is not concerned with the meaning of religious experience. Emotional needs are too private, too various, and too conflicting, religious experiences too diverse, to precipitate ideas that can be worked in common by all men

alike. The innumerable contradictory and antagonistic theologies and concepts of God bear abundant witness to that. Religious beliefs, being private, do not lend themselves to membership in a public truth shared by and useful to society as a whole. But the truth that really counts for Dewey is precisely the social truth—the truth that emerges from the cooperative search of mankind for ideas which all individuals can handle together as instruments for promoting the welfare of the race. Experiences that we do not and cannot share with others cannot give rise to ideas which are socially workable. But only such ideas can lay claim to “universal” validity, and only such ideas can be made the subjects of fruitful investigation. Therefore exploration of the significance of religious experience cannot lead to knowledge, and is a fruitless task for philosophy to undertake.

Chapter XXVIII

BERGSON, VAIHINGER, CROCE AND GENTILE

I. HENRI BERGSON

Reality Given in Experience, Not by Reasoning. In many respects akin to pragmatism is the philosophy of Henri Bergson (1859-1941) who was professor at the Collège de France from 1901 to 1921. Bergson is easily the outstanding thinker of the present century in France, and is perhaps the most eminent of contemporary philosophers.

Like the modern empiricists, Bergson insists that experience is Reality, and Reality experience. To discover the nature of the Real we have only to consult experience. Moreover, that nature is not inferred from experience, it is given in it. Experience is what we experience it to be.

If now we look at experience, what do we find there? We are first of all struck by the familiar oppositions of subject and object, the inner and the outer, flux and stability, mind and matter, sensation and thought. At the same time, those oppositions are all oppositions *within* experience and seem interrelated and interdependent. We have, therefore, to ask how they are related, and whether they do not display some least common denominator, and on which side the heart of the Real is situated.

Again we note that immediate perceptual experience does not pass into complete oblivion as it passes away. It is no longer consciously present, to be sure; nor for that matter is it consciously past. Still it does not evaporate when and where it falls. It rather seeps beneath the surface and is all retained and conserved in an underground reservoir in which much of it is forgotten temporarily or for good, but from which some of it bubbles up, often unaccountably and fantastically, as *conscious* memory.

Memory plus Experience the Basis of Useful Ideas. Conscious memory does not, however, except under abnormal conditions, well up haphazard from the subterranean water-table of pure memory. We dig for it, so to speak, and only pump to the surface as much of it as

suits the needs and purposes of present experience. Mingled with appropriate memories, immediate experience becomes *useful*. It becomes an experience that reconstructs a coherent and orderly past and is able to anticipate the future. Thus it becomes an instrument of survival and of progress. It enables the organism both to adapt itself to an environment and to devise means for adapting the environment to its own organic impulses and aims. It is of the nature, then, of everyday perception to be forward-looking. The very curdlings of sense-experience into objects represent ways in which the organism acts in and towards the situations in which it finds itself involved. When I say, "Thus I have done in the past and so I will do in the future," I am talking about a "thing." Sense perception is not of things. Things are useful and reliable manipulations of sense perception.

So, too, the "ideas" to which the commingling of memory with immediate sensations gives rise are practically motivated, and the ordinary workaday world with its "fixed" quantities and qualities is a convenient, shorthand method of dealing with the rough and tumble of perceptual experience. The same is true of our more abstract concepts. They are signals of how we should act in a given situation. The more "remote" the concept is from the concrete situation, the more objective, disinterested, precise, and therefore useful are the directions it gives. For example, mathematics, mechanics, logic, and the like, tell us *exactly* what to do under certain circumstances. We reject their advice at our peril. Therefore, the "purer" and more "theoretic" a concept seems, the more practical it really is.

The Understanding and the Real. Paradoxically enough, however, the better an idea works in teaching us how to cope with external experience, the worse it works as a teacher of what we ourselves really are. For thinking distorts and fails to give the whole of experience, just because it must select and emphasize those experiences which are most *useful* and must construct its world of them. It therefore necessarily falsifies the Real.

Moreover, reason, being an instrument for adapting the experience we call ourselves to the experience we call an external environment, envisages, approaches, and handles things from without. This is true of its dealings with us as well as with the outer world. When we *reflect upon* and try to *understand* ourselves, we are dealing with ourselves in terms designed to stabilize and crystallize situations outside us in a shape that enables us to get a foothold and a handhold on them. We are not dealing with ourselves in terms suitable to ex-

press the unstable, uncrystallized, infinitely varied and fluid character of our entire experience as we feel it from within.

This, however, is not to cast a slur upon the intellect. Reason is an indispensable instrument in enabling us to realize the infinite possibilities of experience, since an environment that is crystallized and solid enough to grasp affords us more opportunities of doing things with it than an environment so fluid and inchoate that it slips through our fingers. Order is a better theater than chaos for the free exercise of the inventive and histrionic powers of the actor. To the free and complete self-expression of experience it is as necessary that its stage should be set as that its lines should be spontaneous and improvised. In setting and ordering the stage and arranging the objective accessories of action, the intellect invites experience to endless and free experimentation. It holds up all sorts of possibilities. It suggests innumerable plots and plans to which the stage lends itself. It hints at ways in which the furniture and the scenery may themselves be altered and the arrangements changed.

The Real Given in Experience as an "Élan Vital." Still, the fact remains that the intellect cannot give us the whole of experience, or experience without falsification, or experience sensed from within. *Intuition* alone can give us that. To get at the *reality* of experience, we must undo the work of the intellect. We must escape from its "useful" categories. We must relapse into the richness and vitality of the freedom and flux of immediate feeling. We must substitute the "real duration" in whose sparkling waters we splash and swim for the clock-time on whose dead current we are helplessly carried. We must revitalize the panorama of nature with all the wealth of detail ignored or erased in the "useful" map compiled by the intellect and the sciences.

When we have done this, and have *intuited* experience from within rather than *known* it from without, what do we find? We find that its essence is an *élan vital*, a thrusting and pushing and flinging of itself forward and an expansion outward to which no limit can be set. But thrusting and pushing and expanding are *efforts*, and efforts mean *resistance*. This resistance cannot come from the outside, since experience is all there is. It must be, therefore, of the very nature of the *élan vital* to create resistance in order to overcome it. The *élan vital* gives rise to what we call matter. Matter is the basis of everything that appears habitual and mechanical and static.

Against this tendency in itself to relapse into fixed and lazy ways, the *élan vital* is always struggling. That it is only partially successful is shown by the existence of experience that we call an external, material

world. That it is not wholly unsuccessful is shown by the emergence of the living from the inanimate, and by the development of instinctive and intellectual levels of experience as instruments for adapting organisms to their environment, and for thus preparing the way for more complete self-expression of the *élan vital*.

The Physical World as Dying Spirit. The physical universe, then, which the *élan vital* is forever peeling off from itself, is spirit from which vitality and spontaneity and gaiety and freedom have departed, and which has become merely the husk of its true self. But the life of the spirit is intensified and brought to the height of its activity by the effort of sloughing off the bonds of matter and unleashing to its fullest length the freedom it is forever craving and winning for itself.

At the same time the physical portion of experience, as well as the spiritual, is in a state of uninterrupted growth and evolution. From moment to moment the material world is being built up and crystallized and thrown off by the onward-moving, living essence of experience, as the *élan vital* precipitates from itself the solidified and formalized consciousness and the mechanical habits of behavior into which its free activity is forever condensing.

God. The central, animating point, from which the *élan vital* radiates is God. From God experience surges outward and ever outward in ever widening circles, driven ceaselessly towards increased richness and spontaneity and creative freedom. It creates and outgrows matter. It creates life. It focuses itself a myriad times over in individual human consciousness. It unites the new perspectives it gains after this fashion in the wider vistas afforded by social ties and institutions and moral activities. Its evolution is the creation of bigger and better opportunities for action and for co-operation. It breaks down and overcomes the distinctions it creates between one self and another, between the inner and the outer, between man and the universe. It merges the individual with his fellows and mankind with nature, and reveals to them their essential oneness.

But God dwells not only at the center. He is also the centrifugal urge, the "up and away" in search of ever fresh adventure, that is the breath of life to all existence and to all experience. God is not a *fait accompli*. He is in the making, as all things are in the making, and to the making of him as of them there is no end. He is inexhaustible activity, he is limitless freedom. He is an ever opening and ever widening vista of more and more to be done, and of more and more energy and vitality at hand for the doing of it.

II. HANS VAIHINGER

Concepts as "Fictions." In Germany we find another system that has something in common with pragmatism. This is Hans Vaihinger's (1852-1933) philosophy of the "as if." Vaihinger is in step with the Mach-Pearson theory of scientific concepts as conceptual shorthand, and in sympathy with the pragmatic applications of it. He extends it from the concepts constructed by the physical sciences to theological, moral, and social ideas and ideals. But he carries the theory a step further. These concepts and ideas, he tells us, are not even true to *experience*, not to speak of being valid beyond experience. On the contrary they are falsifications of experience in the interest of greater convenience and edification. They are *fictions*—stories that it is pleasanter or more profitable to tell ourselves about the facts than to accept and transcribe the facts as they are.

For example, we might say, it is more convenient and it pays better to act *as if* the universe were an orderly and determined affair. Therefore, in spite of its experienced disorder and contingency, we invent a story about it to the effect that it is as we wish it to be. We create the "fiction" of natural laws, atoms moving about in space in a predictable manner, and the like. Again, it is comforting to believe in a God who is all powerful and all good. This is an illogical inference from the kind of world in which we live. So we create the fiction that there is such a God, and deal with him *as if* he existed. Or it may be that for one reason or another we find it convenient to view our fellow-men *as if* mankind was essentially depraved or essentially good. As experienced, they are perhaps neither. Therefore we "make believe" the doctrine of original sin, or draw an expurgated portrait of the noble savage.

All objects are subjected to the falsification of the *as if*. They are viewed neither as they are experienced, nor in accordance with the demands of pure logic. They are fictions about experience invented to bring it into conformity with certain values and ideals. These values and ideals arise out of biological needs and the exigencies of the economic struggle. Hence our entire systematized universe—scientific, moral, theological, and metaphysical—is a sort of novel or romance, written about experience, to be sure, but subjected to all sorts of falsifying alterations and expurgations in order that it may suit our preferences and prejudices, which, being dictated largely by biological and economic interests, are for the most part bourgeois.

McTaggart and Pringle-Pattison. It should be stated at this point that the first third of the twentieth century, despite its dominance by pragmatic and allied philosophies, has not been without defenders of the old-fashioned, Victorian idealisms. Thus in Great Britain, J. M. E. McTaggart (1866-1925) and Seth Pringle-Pattison (1856-1931) carried on the Hegelian tradition, though both were much influenced by the contemporary stress laid upon the part played by the human and individual mind in determining the configuration of its experience.

III. CROCE AND GENTILE

The Absolute an Integration of All Human Interests. In Italy, Benedetto Croce (1866-) has preached Hegelianism. For him Reality is spirit, developing, as with Hegel, through a conflict of opposites. But the logical and the dialectical movement is not, as it was for Hegel, both the root and the flower of the world-process. The root is the living, moving, developing character of spirit, not an absolute Idea that finds in process and progress a means to self-expression. And rationality is only one of several independent ways in which the spirit flowers. The Absolute is as multiform and rich an experience as these ways indicate. Its various aspects do not have to be reduced to one another. We do not have to seek a logical basis for artistic creation or for natural phenomena. The different activities of consciousness are self-justifying. The bond that unites them lies in their common subservience to the single and undivided life of the spirit.

Within that life, however, we may make the time-worn distinction between contemplation and action. We perceive and know, and we also do. The perceptive side of experience presents itself in intuition on the one hand and intellectual knowledge on the other. Intuition is more than the mere occurrence of sense data. It includes memory and imagination and feeling, and the spread-out, drawn-out spatial and temporal way in which they are given. It includes, in short, all that is *immediate* and concrete. And it gives us, for all its primitive and innocent nature, a true knowledge of the nature of the Real.

Intuition, Knowledge and Volition. Moreover, intuition is not a passive content of impressions and images. It is warm, glowing, gesticulatory, meaningful, a sort of talking to one's self preparatory to expressing one's self in articulate speech.

This articulate speech comes with concepts, and consists in passing judgments on things. Some judgments and concepts sum up and mean universal aspects of all experience under which every individual

item falls. These are the instruments of logical and philosophic thinking. Others, such as scientific concepts, deal with restricted fields of experience, and constitute an artificial shorthand for dealing with their data in the most concise and convenient manner. Their function, unlike that of universal concepts, is not to see into the nature of experience, but to enable us to manipulate it in accordance with our practical needs. They are, so to speak, an extension of the will into the realm of knowledge, and a coloring of knowledge by desire.

The active, willing side of experience, by which we adapt experience to our own ends, instead of adapting ourselves to its nature as we do in our intuitional and intellectual activities, has also its two sides. We set before ourselves ends whose attainment is either useful to the individual or beneficial to all alike. In pursuing aims of the first sort we are actuated by expedient, "economic" motives. In hitching our wagons to the star of what is desirable and good in itself for all men under all circumstances, we are acting from moral considerations.

The Four Expressions of the Absolute Spirit. Thus we reach the four great expressions of the spirit, the *beauty* that irradiates intuition, the *truth* that enlightens the intellect, the *utility* that gives value to "economic" activity, and the *goodness* that suffuses moral conduct. These four forms of the Absolute Life interpenetrate one another in such wise that everything that exists has a value of some sort, which cannot be annulled by its lack of value in other fields. What is immoral or untrue or useless may yet be beautiful. The evil and the ugly may have their practical uses, or be intelligible. For that matter, nothing can be entirely bereft of every value, since nothing valueless can exist.

In this way we are able to reach a synthesis and reconciliation of the opposites that divide each field into two camps. Where the Absolute is unable to make the unintelligible intelligible, it may yet make it beautiful. It may bring intelligibility into ugliness even when it cannot bring beauty out of it. It may harness evil to practical use though it cannot convert it into moral good. The Absolute always in some way triumphs over every negation, since what is negative to one aspect of its existence is positive to another.

Upon the significance of history Croce is no less insistent than Hegel. The Absolute is a history—a history that combines activity with knowledge. The Absolute enacts the world-process and at the same time reflects upon it. So, too, in human history we have both events and a knowledge and evaluation of them. The events themselves were human deeds guided by the knowledge of those who performed them.

We, if we would also know what has *really* happened, must enter into the past and see it through the eyes of those to whom it was present, and at the same time re-assess it in the light of the future to which it led and in which we now live. The historian both enacts his subject from moment to moment and yet surveys it as a whole—as the Absolute does. He is in his own right the profoundest of philosophers. History needs no philosophy of history, since history is itself a philosophy of the nature of the Real.

The Absolute a Unity-in-Plurality. Giovanni Gentile (1875-) reverts towards a more orthodox absolute idealism. To be sure, he contends, Reality is measured in terms of experience here and now. And in all times and places experience is being remolded by our so-called reflection upon it, which is an activity not of simple reception but of creative reconstruction. At the same time, the emphasis is shifted from the individualistic and multiple aspects of consciousness, which Croce had stressed, back to its unity and singleness.

We human beings are all vehicles for the self-expression of a single absolute thinker. This thinker has an absolute Idea, changeless and eternal, of which the world-process is the expression, and by which our individual remodelings of experience are motivated. Again, the absolute Idea, as in Hegel, is a plurality in unity. It is creative and created, subject and object, all at the same time, just as the self-conscious self is at once an "I" and a "me." It goes out from itself and creates, as an artist paints his picture or as a poet writes his epic or his drama. Indeed, art is the human expression of its outpouring. In religious experience and aspiration it presents itself to itself as the object, the *me*, of which it is conscious. Finally, in philosophical systems it seeks to unite the "I" and the "me," itself as subject and itself as object, in a vision of its self-creative and self-conscious nature. But once again, the world-process as it occurs is Reality. History is the self-revelation of the nature of the Absolute to itself. Therefore history is the vision of truth. That is, it is philosophy.

Chapter XXIX

NEO-REALISM

I. REJECTION OF IDEALISM

Reality External to and Independent of Consciousness. In spite of the arguments of the empiricists, the pragmatists, "vitalists" like Bergson, and the monistic and pluralistic idealists, there were thinkers who remained unconvinced that Reality was fundamentally mental in character, and that nothing existed except centers of consciousness and their experiences. Consciousness and experience, they maintained, were *essentially* consciousness and experience *of*, and *of* something external to and independent of mental activity, which, if all minds whatsoever were extinguished, would still be there. Reality, in a word, refused to be experience, to be wholly experience and nothing but experience. So it is that the present day has seen, along with other philosophic movements, a reassertion of realism in one form and another.

In reviving realism, however, its champions have revived it with a difference. The older modern realisms tended to locate the independent objects of sense and knowledge in enacted concrete existence, material or immaterial, like atoms or souls. The new realisms have extended the field of entities whose being is independent of being perceived or conceived to include unsubstantial objects, such as essences like redness and oneness and beauty and goodness, and even logical propositions and logical absurdities. In this respect the neo-realists show a Platonic turn of mind. Plato, it will be remembered, attributed to the Ideas a being that was neither physical nor mental but either purely logical and ideal, as some commentators claim, or simply *sui generis*.

II. MEINONG

Experience an Awareness of Independent Subsistent and Existent Objects. In Germany the leading "neo-realists" have been Alexius Meinong (1853-1920) and Edmund Husserl (1859-1938). Meinong was influenced by a slightly earlier thinker, Franz Brentano (1838-1917), who as a psychologist pointed out that the preposition *of*, which

dangles from experience, is not so much a hawser anchoring it to an external object as a kind of tentacle reaching out and groping for objects both existent and non-existent. The strength and vitality of experience goes into this tentacle, which simply *must* attach itself to an object of some sort, real or imaginary. Awareness of being aware of an object, reflection and self-consciousness, are pale and secondary in comparison with the primary consciousness of *things*.

Meinong calls his philosophy *Gegenstandstheorie*, or theory of objects. The independent objects upon which the "of-ness" of consciousness lays hold are, he tells us, by no means limited to physical existences. They include things like the Platonic Ideas—mathematical entities, essences like blueness or goodness, logical propositions, and self-contradictions like round squares. In a word everything that can be thought about or mentioned is equally independent of being thought or talked about. To distinguish abstract, logical objects from the concrete, physical objects, Meinong uses the term "subsist," instead of exist. Concrete things *exist*. Logical essences *subsist*. Logical absurdities are neither existent nor subsistent. Nevertheless they are in a sense *there* and have being, since we can refer to them. None of these objects would be destroyed if consciousness were destroyed. Physical things would still be there, essences would remain intact, some propositions would still be true and others would still be absurd—ready and waiting for a newly born consciousness to come along and perceive them and conceive them and recognize their valid or self-contradictory characters.

There are even "subsistent" objects of *opinion* as well as of knowledge. If for example, I say, "I *think* that the weather will be fine," or "I *take it* that this man is honest," *that the weather will be fine* and *that this man is honest* are objects of opinion. If I can say, "The weather *is* fine," or "The man *is* honest," both propositions are objects of knowledge. Doubt enters into one of these pairs of statements, conviction into the other. In the one case I *assume*, in the other I *judge*. But both kinds of propositions are equally objects that consciousness is *of*.

Values Independent of Consciousness. Objects, though heterogeneous, may be arranged in a hierarchy. Certain objects give a foundation to others, and are indispensable conditions of their existence or subsistence. For example, the subsistent proposition, *the weather is fine*, could not subsist and be an object of knowledge unless there were such things as weather and fine days. Thus increasingly complex and

superior objects are built up out of comparatively simple and inferior ones.

Only objects of judgment or opinion can be regarded as good or bad. I can indeed immediately feel the pleasurable of pleasure and the painfulness of pain, but I cannot sense the goodness of the one or the badness of the other. *Values* pertain only to propositions, and may run counter to immediate feelings. For instance, I may judge that something, however disagreeable, is good, or something, however pleasurable, is bad. Some propositional objects *ought* to exist or *ought not* to exist, whatever felt pain or pleasure their existence may involve. Such objects have *dignity*. We also *desire* to enact or to annul some propositions, whatever their pleasure-pain content may be.

Nevertheless, goodness and badness are not altogether independent of evaluation in terms of pleasure and pain. The good "propositional" object, whether or not it brings a painful or a pleasurable sensation, is an object the knowledge or opinion of whose enactment gives us at the moment a feeling of pleasure. For example, it is a satisfaction to propose to one's self a painful operation. If the proposition were unsatisfactory, we should not entertain it and act upon it. The operation in question would be undesirable or ought not to be performed. But, being satisfactory even though its performance entails pain, it is something we desire to have done and feel ought to be done.

It follows that value inheres in propositions and is quite as independent of consciousness as the propositions themselves are. Whether or not minds exist or bodies exist, the proposition "a diseased appendix is an appendix to be removed" is a satisfactory and *good* proposition. So, too, quite independently of the existence of body or mind, the proposition "men are nothing but cannon-fodder" is a *bad* proposition in itself. It is neither *dignitative*, nor *desiderative*, to use Meinong's terms.

Objective Reality and Experience. The relation of objects to minds is in a way equivocal. The object is both in the mind and outside it. Whatever the nature of the object may be—whether it is a round-square which can neither *exist* nor *subsist* in itself, or a proposition that *subsists*, or a physical fact that *exists*, or a future or a past event—it is present and existent *in* the mind of which at the time it is the object. It is part of the *content* of that mind's consciousness. But it owes neither its subsistence nor its existence to being *in* the consciousness in question. Still, even its independent being can never be out of the reach of the mind. Even when it is unperceived it must be perceivable, and when it is not entertained it must be entertainable. An

entity that was essentially such that it could never become an object of sense or thought or reference would be non-existent and non-subsistent. It would be worse off than a square circle, since it would have no self to contradict. Objective reality must therefore be congruent to the mind and *before* it as an object of possible entertainment, even when it is not *in* it.

III. HUSSERL

Phenomenology. Husserl, to whom we now turn, agrees with Brentano and with Meinong in regarding consciousness as essentially a set of tentacles attached to objects. Hence there can be no such a thing as a study of consciousness as such, detached from the objects to which it is affixed. To study consciousness is to study awareness of something beyond consciousness, which inserts itself into and becomes part of conscious processes. This description of consciousness of objects, Husserl calls "phenomenology."

But can such a description be undertaken? If all consciousness is awareness of *objects*, how can there be any left over for the investigation of that awareness? However, fortunately for phenomenology, consciousness is not merely a mass of tentacles wrapped about and adherent to objects. It is also reflective and self-conscious, and hence can be aware not only of objects but of itself—remembering always that the self is essentially a consciousness of things other than itself.

Still, in studying itself, it has to anesthetize and immobilize itself and loose its hold upon its objects. Phenomenology, therefore, cannot *feel* the nature of consciousness from *within* and experience its *contact* with its objects, or even, like psychology, observe its ordinary functioning, since that functioning also is in abeyance. It can only make a post-mortem examination in which the tentacles are as dead, so to speak, as the objects to which they are attached, and the objects, being on a par with the tentacles, appear merely as a prolongation of them. Instead of really and sensitively touching its object, consciousness merely sees from the outside that its nature is to be in touch with objects, and that its desensitized tentacles are in contact with them.

Analysis of the Nature of Experience. The particular interest of phenomenology is to investigate the general character of that contact. This it can do in a perfectly detached and "objective" way, thanks to the temporary withdrawal of the *inner* consciousness and activity from the subject-object relation, and the concentration of attention upon that relation as seen from the outside. All that phenomenology does is to see from the outside and to describe to the by-standers what it

so sees. Furthermore, its descriptions will be exact, since they are mere anatomical charts. And they will have universal validity, since they deal with the formal structure of consciousness in general.

What, then, does our phenomenological anatomy of consciousness reveal? It reveals consciousness as the preoccupation of a subject with an object, expressed in a variety of attitudes towards a content of sense perceptions and images which are *of* an object that can be known and characterized. Preoccupation with an object is equivalent to *meaning* that object. Attending to it is *intending* it, and intending it to the exclusion of other objects. Hence consciousness can be defined as *meaning* or *intending* an object. Meaning involves someone who means something. He expresses his intentions in the way he behaves towards this "something." He likes it, dislikes it, reflects upon it, manipulates it according to what it means to him. But this is not all. Experience also signifies to him the existence of an external object which has meaning for him, and which can therefore be known and practically dealt with and made the object of his meaningful activities generally.

Objects as Meanings. Objects, therefore, must be capable of meaning something. They are what they can mean to us. However, when we are not there, their possible significance is not destroyed. Hence they continue to exist. We can, to be sure, never exhaust their whole meaning. We see them now from one side, now from another, in a series of perspectives. Hence we can never be exactly and wholly sure what we do mean by them, and what they can mean to us. So it is that we fall into error regarding them.

Our "phenomenological" study, however, confining itself to the universal aspects of the given, and never meaning and trying to see more than it does actually see, is exact and trustworthy. What we *perceive* of the object is true as far as it goes. The universal concepts we draw from that perception are also true and reliable, since they give us the fixed forms and essences exhibited by what is observed, and give them as they completely are. These essences, since they are self-existent objects of thought, are not constructed from sense-experience. They are directly intuited.

Take, for example, any *existent* object. What do I *mean* by it, and what does it *mean* to me? It means to me and I mean by it something I like or dislike, something that has for me various qualities varying in different perspectives, something that may be described in terms of chemical elements and of the entities of physics. It means finally something existing independently of myself. To you it may have different meanings, according as you like or dislike and see it in other

perspectives, or perceive other qualities in it, or hold another opinion regarding its chemical constitution or the nature of the physical elements of which it is composed.

What, then, *is* the object in itself? It is all you and I mean by it, and all it means to you and me. Those meanings may be increased by other minds who find in it significance that escapes me, or I may add to them myself as I continue to explore it. We have not so far exhausted those meanings. That is to say our knowledge of it is incomplete. We may read into it meanings it does not possess. In that case we are mistaken and in error about the object. But the meanings we discover were there before we discovered them. And the meanings we falsely read into it were never there in the object at all. So too the meanings we now find in it, would remain in it in our absence. The object in itself is everything it can mean to everybody. Only a portion of those meanings are what any one person means by it.

Take, however, a *quality* of the object. Here I mean a universal essence or nature that is what it is, and that does not differ in this object and in that. The particular object in one perspective may be round, in another, oval. But roundness cannot be circular in one perspective and oval in another. In universals we have objects whose meanings we can immediately exhaust, and that mean to us at once and directly everything that they are. Such objects are given in one fell swoop, and given exactly as they are and in exactly the same way to all minds. Though I may not mean by the object exactly or wholly what you mean, I do mean by roundness precisely what you do. Nor can the meaning of roundness be added to or altered, once we have meant what we do by it. Furthermore, roundness would not be meaningless, if our minds were blotted out. It would not become nonsensical, simply because consciousness of it no longer existed. It would still have meaning in itself and continue to subsist even if there were nobody to mean anything by it, and even if there were no existent objects to enact it.

IV. RUSSELL

Mathematical Logic—Its Application to Philosophy. A view in some respects similar to that of Meinong has been advanced in England by Bertrand Russell (1872-). Not only is Russell one of the most eminent philosophers of the day; he is one of its most distinguished logicians and mathematicians. In connection with Whitehead he has effected a conjunction of logical with mathematical thinking, in which logic has been made expressible in mathematical symbols,

and mathematical principles and axioms have been identified with the fundamental principles of logic. Bringing the two together not only has produced a symbolic and mathematical logic, but it has permitted and stimulated new mathematical concepts, as for example the theory of fluxions and of the continuum, which have enabled us to overcome the paradoxes of Zeno and to bring the logical concepts of space and motion into accordance with the perceived facts. In this way the old contradictions and antinomies connected with the idea of the infinite have been cleared away. It is the application of this new logic to sense-experience that inspires Russell to construct his own system. It now appears to him possible to bring generally the principles of logic into conformity with the data of sense, and to combine them in a vision of Reality in which "transcendental" and metaphysical factors are not necessary. This he has tried to accomplish in his own philosophy.

Reality a Totality of Existent and Subsistent Entities. Russell believes that objects exist independently of any experience of them, and that they include not only physical things, but such objects as relations, mathematical entities, values, and the like. These entities also exist independently of one another and can be referred to and meant separately. For instance, a relation has existence and meaning apart from the particular items it relates. Reality is therefore pluralistic and discrete, and may be called "logically atomistic" in nature.

This, however, does not imply physical atomism. Believing as he does that logical relations of the same sort are independent of the terms they unite, Russell also rejects the view that logical propositions are ultimate entities. They can be pulverized into constituent items, and either one of the terms related can be replaced by a new one without depriving the rest of the proposition of its original meaning. For example, if, instead of saying *Socrates is mortal*, I say *Plato is mortal*, I do not change the significance of the *is mortal* part of the proposition. And if I alter *Theaetetus is sitting* to *Theaetetus is flying*, I do not disturb the *Theaetetus is* portion of the statement. Such changes do not put a whole new proposition in place of the old. They merely revamp the old one, leaving it as it is except for the altered term. Propositions are, then, atomic in character.

Point-Events. The particular items of which Reality is composed fall together into systems. These systems are grasped by logical thinking, of which they are the objects, and are expressible in logical and mathematical formulae. The data that are thus systematized are given in sense-experience. They are not, however, given as a passive stuff.

They actively *occur* from moment to moment. They are better described as *events* than as things. To emphasize the active, *occurrent* character of sensory stuff, Russell, and, as we shall see in a moment, Whitehead, describes what is experienced as *point-events* taking place in *space-time*. Their time-aspects, as *happenings* which pop in and out, and prolong and sustain themselves, are no less important than their spatial, spread-out, side-by-side character.

Sense is an *acquaintance* with these point-events, which enter into relations, exemplify forms and laws, and exhibit mathematical principles. Logical judgments *describe* these data by interpolating the relations that bring them within classes and systems and that introduce a structure of some sort into their existence. Perception, we might say, gives us the matter of which experienced Reality is composed, logic the forms; remembering always that the material items and the forms are *objects* and exist independently of one another and of any mind to perceive or know them.

The Identity of Mental, Physical and Logical Data. For that matter, and here we are reminded of Mach and James, *mind* is merely one arrangement or system of the same sensory stuff and logical forms as in other relations constitute the physical world. It is of the nature of this stuff to appear. Reality is appearance. Systematized appearances form physical objects. When further and more subtly ordered by means of mathematical and logical principles, they are construed as the physical sciences conceive them. But the entities that the physical sciences conceive are not concrete and sensory. They do not, in Meinong's phrase, *exist*. They rather *subsist* as logical constructs.

But it so happens that some of the systems we call physical bodies not only introduce order and relations into the sense data of which they themselves are composed, but also give additional focus and another frame of reference to the sense data constituting other bodies. Sense data thus doubly controlled will appear in two bodies at the same time—in a body *of* which they are appearances and in a body *to* which they are appearances. In that case the same item of experience figures as the experience of one body by another. The ability of one body to provide an additional focus and frame of reference to the sensory stuff organized by another body is expressed by the possession of a nervous system and brain (which are themselves complexes of sensory items) on the part of the body in question. And the consequent appearance of the qualities of one body in connection with another thus outfitted we call *consciousness* and *mind*.

The Nature of Mind. In the presence of a conscious body the sensory stuff of which other bodies are composed, and the logical systems by which their constituent items are related and given form, owe a double allegiance. On the one hand, they are attached to the objects they constitute, on the other, to the bodies that, as we say, *perceive* and *conceive* them. Their attachment to the one makes them *physical* facts; to the other *mental* facts.

One and the same appearance, then, may be both physical and mental at the same time and only mental or only physical at a given moment, depending upon conditions. It is physical in so far as its presence is dependent upon the system of which it is an appearance. It is mental in so far as its presence is dependent upon another system, of which it is not the appearance but *to* which it appears. Such a sensory-item is physically an *aspect*, mentally a *perspective*.

Since it is doubly moored, either its physical or its mental anchor may be tripped without setting it adrift. Floating free of its physical mooring, it is a dream or an image fastened to and caused only by the brain. Detached from the brain, it remains anchored to the external body as a sensory-item that is still *there*, although the other, *conscious* body is not on deck to perceive it. Secured firmly fore and aft, it is one body's perception of another body, or, it may be, its conception of a logical system. Severed, if that were possible, from all relations whatsoever, it would be neither physical nor mental. It would neither be an appearance of anything nor an appearance to anybody, or, if it were a concept, it would revert to the status of an essence that was neither enacted in any physical system nor entertained by any mental one.

Sensory items are attached to their physical moorings by the chain of ordinary, physical causation, whatever a linkage of that sort may really be. They are, however, anchored to the brain of a mentally constituted body by a cable, woven of Meinong's and Husserl's "meaning." When they appear as a mental perspective, they are what we *mean* by other bodies. What we will mean by them, and what they shall mean to us, is of a complicated weaving, the strands of which are drawn from our particular memories and associations of ideas and habits of thought and action. The same objective-datum may appear in one perspective to you, in another to me, or in different perspectives from moment to moment to either of us. The bewildering differences and shiftings of our mental perspectives and meanings are due to the different ways in which the strands of mental or, as Russell calls it, "mnemic," causation are intertwined in different people.

The Free Man's Worship. In a Reality so composed Russell finds no place or reason for entities like immortal souls and gods. Logic and science are fatal to ordinary religious belief. But the disappearance of such beings need not leave us without worship. Goodness and beauty *subsist* in all their completeness and all their splendor, even though they nowhere *exist* concretely except in fragments and broken gleams. They are none the less beautiful and good and worthy of adoration, because there is no God about to exemplify them. Without a God, to be sure, we have to rely on our own efforts to save ourselves. Nor have we anyone to whom to turn for consolation in time of grief and trouble. Still, it is far better to face things as they are than to seek comfort in delusions. We must accept life for what it is, alter it for the better when and where we can, resign ourselves to it when and where we cannot. Nor need we ever lack the consolation and the strength that come from our ability to contemplate the timeless essences of goodness and beauty, to whose eternal *subsistence* the destruction of all *existence* would make no difference. To be guided by them in all we do, through thick and thin, come what may—that is the free man's worship.

V. WHITEHEAD

The Actual World an Enactment of Essences in Point-Events. A. N. Whitehead (1861-) of Trinity College, Cambridge, and more lately professor of philosophy at Harvard, is, like Russell, not only a mathematician and a logician but a philosophic thinker of great prominence. Like Russell he considers the sensory stuff of which experience is composed to consist of *point-events* in *space-time* which occur and exist independently of a perceiving mind. These occurrences he calls *occasions*. Over and above them there exists a world of essences, or *eternal objects*, which intersect one another in any given *occasion*, and thereby make it *this* thing rather than *that*. Thus every actual event represents one of an infinite number of ways in which essences might be combined, and the concrete, actual world is a multiplicity and *togetherness* of events selected from an infinity of other possible worlds. The actual universe is what it is because in each one of its constituent occurrences the eternal objects have come together as they actually have, rather than in any other one of the infinite number of possible combinations into which they might have entered. The actual, both in whole and part, is a limitation of possibility.

Since events, or, as we may now call them, *realized experiences*, are

together, they are in relation to one another, and these relationships enter into and form part of them. Events enter into one another's essences and become part of one another. They have temporal and spatial relations. They are together in ways expressed in the categories. Moreover, their relations exhibit an order of increasing abstractness. Relations are themselves eternal objects, and the entry of an event into relations, and of relations into an event, is part of the *togetherness* of the essences that congregate in that event.

Events, and here Whitehead agrees with Russell, are not passive, but active. They are in flux and becoming. They are processes of focusing eternal objects. As processes they have a past consisting of the events from which they have emerged and in relationship to which they are still bound, and a future consisting of the subsistent, but as yet unenacted, essences to whose combination the process of becoming will lead.

The Nature of Mind and Consciousness. Consciousness and mind are not entities apart from events. Every event is an item of experience, with two poles, one mental, the other physical, between which it fluctuates. Consciousness is an ordering and unifying of events such that the whole appears as more than the aggregate of its parts and as a new unit of occurrence. It is not analyzable into a succession and collection of event-experiences. The totality of these experiences constitutes itself a single event, and is therefore an experience of *itself* as well as of the occurrences that constitute it. It is a *reflective* experience, a report *to* itself *about* itself. Our personal, individual, self-conscious minds are such events.

But minds are no more isolated and independent than are the items of event-experiences entering into them. They are in relationship to one another and to all else. Outside patterns are interwoven with their patterns. They know both themselves and a universe in the midst of which they are set, because event-experiences occurring in other contexts can also enter into them, and because the content and conformation of other wholes can intersect them. So it is that the content of *my* consciousness is also an experience of events happening outside and independently of myself.

But this is not to say that *I* exist independently of *them*. On the contrary, the content of my consciousness, or in other words, the consciousness of which I am *self-conscious*, is filled with occurrences that belong also to other complexes. *I* could be withdrawn and yet leave those events unaffected so far as their other contexts are concerned, although in that case they would no longer be *my* experience. But if

they were withdrawn, there would be nothing left for me to be aware of, and therefore no awareness to report to itself anything about itself. Since every conscious subject is simply a unified awareness of some aspects of other events, there can be no such thing as an independently existing individual thinking subject.

Description of the Real. Let us now take a look at Reality as we have so far developed it. It is an infinite capacity and potentiality for the occurrence of event-experiences. It is also an indefinite actualization of this capacity in a world of realized experiences and occurrences, which, however, far from exhausts the realm of the potential. Here and now the actual world might be different in part or whole, so far as possibilities are concerned.

Again the universe of actualized event-experiences does not take place simply *here*. It takes place *there* as well. It is spread out—that is, in *space*. Nor does it take place simply *now*. It transcends *now* as well as *here* and is therefore in *time* as well as spatial.

Finally, if we examine point-events happening in space-time, we find that in occurring they exemplify *character* of one sort or another. Indeed, their occurrence is a getting together of qualities and essences and relations which in themselves do not change, but simply are disclosed for what they are as long as the event continues to display them. These characters constitute a world of “eternal objects,” manifested in sense-experience but transcending it and subsisting independently of it.

But Reality is more than this. As we have seen, events are *processes*, and by being related in all sorts of ways they enter into one another and form an interconnected *world-process*. In the unity of the world-process not only are experience-events brought together and made part of one another, but the eternal objects, in themselves isolated and reciprocally exclusive, are also brought together. Although they have nothing to do with one another as pure essences, they get together in the occurrence called an object.

The Rational Nature of the Selecting and Enacting Principle. Furthermore there seems to be a tendency to an increasing richness and value in event-experiences. Potentiality is actualized not helter-skelter, as it might have been so far as the mere potentiality of occurring experiences is concerned. It is *possible* for the universe to happen indiscriminately. But the world does *not* happen indiscriminately. It happens in a way limited by the exigencies of logic, by the conditions imposed by certain relations, and by the restrictions laid upon an event by virtue of possessing a specific character of its own. It looks, therefore, as if the actualization of the possible and the unification of the

actual take place in accord with some sort of *standard*, conformity to which is productive of *value*.

If this is the case, however, the Real must contain some principle of selection and limitation at work in the actualizing of *possible* occurrences into *real* event-experiences. Since the activity of such a principle produces, as a matter of experience, a world that we call rational, we may regard it as the reason why the universe is a rational order and the reason but for which the universe might quite *possibly* have been an irrational chaos. This reason we may call God. It is not a concrete thing, but simply that in the Real which brings rationalized concrete existence to pass.

There is, however, a further question that metaphysics cannot answer. Why, we may now ask, does Reality happen to contain this selective, rational principle? Why does *this* particular limitation upon the actualization of the possible exist rather than some other? For that matter, the universe seemingly might have been different without being less rational. It seemingly might have been different and morally more satisfactory. Why then *this* universe and none other? Potentiality, which is indifferent to the rational or the irrational and lends itself indiscriminately to the actualization of any and every world, cannot answer. Neither can the eternal objects, which, so far as they are concerned, might as easily and logically meet together in other ways. Neither can the principle of selection itself. That principle simply *is* there. No reason can be found for its being there, since it itself is the only reason for anything being there and being what it is. In a word, the presence of a God in the structure of the Real is something that nothing and nobody, not even God himself, can account for.

VI. MOORE

We turn now from Whitehead to another Cambridge professor, G. E. Moore (1873-). Moore believes that in our very act of being conscious we affirm, not only the independent existence of an object of which we are aware, but the fact that the object is not in any way influenced or changed by our consciousness of it. Our senses do not color and distort the nature of what they perceive. They give us the object precisely as it is, and precisely as it would continue to be if they ceased to operate.

The Mach-James-Russell view of consciousness as simply one arrangement of the same items that in other contexts constitute physical objects, Moore does not accept. Our consciousness of objects is more

than their mere presence in connection with and dependence upon our bodies. It is an additional and superimposed *meaning* those objects acquire in certain circumstances. When red is seen, it is not simply *there*. It *means* red to us. We, so to speak, *intend* that red shall be red and nothing else.

The values things possess in our sight, like goodness, badness, beauty, and the like, are just as truly qualities of the object, and just as inherent in it, as its color or taste or smell. They do not depend in any way upon us and our attitudes. They, too, are there in the object, whether or not we are there to see and deal with it.

VII. ALEXANDER

Emergent Evolution of the Universe from Space-Time. To S. Alexander (1859-1937), for some time professor of philosophy at Manchester, England, Reality presents itself as a process of emergent evolution in which different levels and orders of being are superimposed upon one another. Each level is the necessary condition of the next higher, and therefore each new order presupposes the existence of all the lower ones, upon the topmost of which it directly rests. But the higher orders though dependent on the lower for their existence, cannot be resolved into terms of the lower. Every level represents a novel, irreducible development. For example, life, though dependent upon physical bodies for its appearance, cannot be reduced to terms of mechanical motion. Neither can mind, which cannot appear except in organic physical bodies, be reduced to terms of organic and vital activity.

The rock-bottom of the Real is space-time. This is the stuff of which all things are made. Space and time cannot be separated from one another except in artificial abstraction from one another by the mind. In reality they form a single entity whose one and only property is motion. Space-time in motion presents certain universal characteristics, which permeate its entire length and breadth, and which we designate as categories. For instance, space-time is, so to speak, mottled and pock-marked with *places*. In other words, the motion of space-time is here *this* motion, here *that*. It is everywhere *something*. Everywhere something can be said to exist—that is, to be itself in contradistinction to something else.

Moreover, the places remain fixed in their contours and differentiated from one another, although their tenants may move in and out. Thus we get what we call a *substance* enduring and preserving its identity

despite the changes that occur in it. Furthermore, these spots of distinguishable motion move about and congregate in galaxies which have a movement of their own. These distinguishable moving galaxies of spots tenanted by distinguishable motions are *things* divisible into constituent elements and parts. Because of the nature of space-time things occur within, outside, above, below, beside, before, after one another, etc. In other words, they are in *relations* to one another. Finally motions merge into one another in such wise that one is the prolongation, or *effect*, of the other. Such motions exhibit *causal* connection. In short every perception, and for that matter every conception, is an aspect or form of space-time.

The Successive Appearance of Non-Organic, Organic, and Conscious Matter. In some of these spots primary qualities appear, and space-time becomes geometrically describable. When such spots stand others off and resist penetration by them we have solidity and matter. They then are physical bodies. Some of these bodies, again, exhibit what we call secondary qualities. They are colored, resounding, hot, cold, and the like. Of these bodies there are some that have an organic and living character, and of these again some that are conscious and think.

Why these different levels should appear in the order of dependence that they do is a question we cannot answer. The lower levels cannot account for the appearance of the higher. To be sure, without them the higher could not exist, but in them there can be found no reason why the higher should exist. We simply have to accept as ultimate the fact that they do exist, and that the lower are the condition, though not the cause, of the higher. It is the nature of the Real to be like that—and that is all there is to say.

Organic bodies provide a specific condition for the appearance of consciousness, which we call a nervous system and nervous activity. Not all nervous activity is also conscious. Some of it is, however, and when we have a nervous system or nervous currents that possess the added characteristic of *awareness* we have *mind*. Mind is a nervous system that is conscious. Once more, why consciousness attaches to certain nervous systems and not to others, and why the same nervous system is now conscious, now unconscious, as when we wake and sleep, is an unanswerable question. It is part of the ultimate nature of the Real that such should be the case.

The Nature of Consciousness. Consciousness is awareness and knowledge of an external world existing independently of the observant nervous system. This awareness of an external object involves

consciousness of the act of awareness itself, just as the consciousness of *doing* anything is a consciousness, not only of *what* we do, but of the doing of it. To be conscious of the activity of being conscious of something is self-consciousness. In this awareness of the act of consciousness *what* we are conscious of is "compresent" with our awareness of the act, just as we could not very well know we were doing anything unless at the same time we knew, however vaguely, what we did. In this way I have an immediate, inner *experience* of the external world as well as of myself. I directly "enjoy" what is outside me no less than what is inside me. I am immersed in it. I am not contemplating it from the outside. I am *living* it.

However, the consciousness of the act as well as of the object of consciousness discriminates between the act and the object. While involving the object in the act, as anything that is done is involved in the doing of it, awareness also separates the object from the act and makes it external. Although in my immediate experience the object acted upon is part of the sensation of acting, it can also be *contemplated* as something apart from that sensation. When I am not *living* the act of being conscious of something, but am *contemplating* the content of consciousness as something external to my awareness of it, I have *knowledge* of the object, not immediate experience of it. Incidentally, Alexander thinks that the *living* quality of awareness rests upon special movements in the brain, which differ according as consciousness is "directed" toward different objects.

Higher Possible Reaches of Emergent Evolution. But we are not yet done with the Real. The highest level that *emergent evolution* has reached, as far as observation goes, is human mind. However, we have no right to suppose that evolution has stopped and that its highest level has been reached. We may believe that our minds are simply flying fields from which Reality will "take off" for still higher flights, and that each new ceiling of existence it attains will prove a floor from which it will soar once more into the empyrean. We may foresee supermen, gods and super-gods, as the Real continues to build higher and richer levels of existence upon the basis of the lower, transcending eventually even mind itself. The vista that opens before us is infinite. The *emergent evolution* necessary to enact the vision it discloses is endless. The everlasting upward thrust of the Real and its ceaseless appearance at new levels—these are God. God does not *exist*, since to say that he exists would be to say that Reality has already risen to its utmost heights. He is in the making.

We must remember, too, that the Real does not rise evenly like

some vast flat continent from the sea of space-time in whose depths it has its bed. Rather is it elevated in islands with flat shores and abrupt inland plateaus from which, as a foundation, its peaks shoot up in isolation from one another. God is being made in spots, and each new upheaval of deity takes place only in and from the loftiest strata of being that have emerged at any given time. It may be that elsewhere the Real has achieved levels higher than our minds. But our minds mark the greatest altitude to which it has risen in so much of the universe as we know about. In our world, it is from ourselves that the hierarchy of heaven will spring. To feel the divine upward thrust within ourselves, to consecrate ourselves to preparing the ground for the next emergence, is to have religious experience.

VIII. NEO-SCHOLASTICISM

Modernism. Realism has also been reasserted by the Catholic Church in a movement known as Neo-Scholasticism. This movement is a reaction against the infiltration into the Catholic faith of what is called *modernism*. Just as Roger Bacon, inspired by the new science of his day, protested against the Church's stubborn attachment to Aristotelian views, so a number of Catholic thinkers were inclined to doubt the adequacy of the Thomistic philosophy to cope with modern conditions, and sought rather to find philosophic support for Christian dogma in the new contemporary systems. Pragmatism, and particularly Bergson, they felt might offer something that the Church could profitably assimilate. Catholic theologians and philosophers should not be held down to any one prescribed system of metaphysics or to any given scientific view. They should be allowed free philosophic speculation and liberty of scientific research as long as they continued to accept the revealed truths embodied in Catholic theology. And they should be allowed to state that theology in the terms of whatsoever philosophy seemed to them to express and support it. Indeed, since religious experience is living and developing, Christian dogma may on occasions be restated, and restated in terms that the experience and the philosophy of the moment afford.

So far as science is concerned, they continued, it is impossible that revealed truth and scientific truth should conflict. Religious truths are true to inner religious experience, scientific truths to the outer physical world. The one need not contradict the other, and both can live amicably side by side.

The Condemnation of Modernism and Reaffirmation of Thomism by the Church. This movement was condemned by the Church, and with it the philosophies that it involved. Catholic thought rallied once more around St. Thomas. In his name, the Neo-Scholastics reaffirmed the existence, independent of the human mind, of both particulars and universals, and of material and immaterial substances, along with the orthodox theory of God and of the soul. The human mind, it was held, is capable of knowing the truth, which is not of its making but is one, eternal, and immutable, and indifferent to its apprehension by the finite intellect.

Kant, the German idealists, the pragmatists, and most modern philosophies, if examined, lead to conclusions subversive to Catholic doctrine, and even those that seem to support it are broken reeds compared with St. Thomas. They are, then, all anathema. Once more, as Leo XIII affirmed in 1879, Thomism is the official and only philosophy of the Church.

IX. SANTAYANA

No less eminent a poet, an essayist, and a master of English prose than a philosopher, George Santayana (1863-), of Spanish birth, educated in America, once professor at Harvard, and now long resident in Europe, has given to realism a naturalistic and materialistic interpretation. Like the other realists we have been studying, he considers consciousness to be an awareness of objects existing outside it and independently. Like them, too, he believes that these independent objects need not *exist* concretely but may simply *subsist*.

Essences and "Animal Faith." Again, like many of them, he believes that consciousness acquaints us with the true nature of the Real. Its presentations do not distort and falsify the object to which they refer. On the one hand, it immediately and intuitively apprehends a world of characteristics and natures, like redness, triangularity, the law of gravitation, etc.—which Santayana calls *essences*. On the other, it intimates the existence of a *substratum*, in which an indefinite number of these essences are enacted.

To be sure, we cannot *prove* that the essences appearing together in experienced objects are focused in and supported by real material substances. But we always treat them as if their conjunction indicated not merely a knot of intertwined qualities in consciousness, but the presence also of an object transcending sense-experience. We deal with them as if they were not only entertained by the mind, but also enacted

outside the mind in some non-mental medium. We take this enactment on *faith*—"animal faith," as Santayana calls it.

We cannot avoid this faith if we are to validate the distinction we find ourselves naturally and instinctively making between the essences considered to be both enacted and entertained, which we call perceptual *fact*, and the essences regarded as entertained but not enacted, which we regard as fancies and concepts contemplated by the mind but lacking embodiment in "real existence." Both the *subsistent* and the *existent* are present to consciousness. But the existent *exists*, and the subsistence *subsists* whether consciousness is there or not. The rose in the garden continues to be an existent fact when all the world's asleep. Plato's ideal commonwealth subsists "in heaven," even though it has never existed on earth, and subsists there whether or not it happens to be entertained by Plato.. Therefore the principle that differentiates the *existent* from the *subsistent* must be independent of the mind, and must operate in the mind's absence.

Why This Universe Rather Than Another? Again, as Whitehead asks, what is it that limits the ways in which "eternal objects" get together? Why this particular enactment of essences which we call the universe? Why is not some other selected out of the infinite variety of *possible* enactments? The selection cannot lie with the mind, since the mind is intrinsically capable of entertaining all essences and all logically possible combinations of them. Nor can it emanate from the essences, since all essences are equally capable, intrinsically, of being enacted. Everything logically possible might, so far as it is concerned, also possibly *exist*.

What, then, is this selective principle which is neither essence nor mind? We must believe in its existence. We show our belief in it in every distinction we make between fact and fancy, the actual and the possible, the real and the ideal. We cannot, as we have said, *prove* that it is there, since all that is given in our experience is either subsistent or existent, is either essences merely entertained or essences also enacted. But to abandon our faith in it would be to cease to be sane, to go mad, and to perish. What then is this principle?

Here it is that Santayana's naturalism and materialism appear. Leibnitz, confronted with the same necessity of finding a selecting and enacting principle, discovered it in a God who chose out of the infinite possibilities of existence entertained by his mind the *best* of all possible worlds. Leibnitz's selective agent was *moral* and actuated by moral considerations. Whitehead in the same situation chooses a

principle that is *rational*. Santayana will have neither the one nor the other.

The Reason Neither Moral nor Rational, but Material. To suppose that the course of events is selected and motivated by a moral purpose is to contradict the facts of experience and to make much that happens in the world unintelligible. The moral shortcomings of the universe—the suffering, the failures, the misdoings, the conflicts, and the evils with which it teems—render a moral *explanation* impossible. So, too, we cannot presuppose a prior rationality that selects and organizes essences in such wise that they meet the demands of reason and form an intelligible world. To be sure, the selective and enacting principle weaves the selected and embodied essences together in an intelligible pattern and supports a rational experience. But it does so, not because its selective activity deliberately follows the laws of logic, but because the minds it brings into being incidentally to its workings have as one of their essential functions the contemplation of things as they are.

Minds are bent, among other things, on *understanding* things and on *knowing* what they are like. To understand and know them is to grasp the principles according to which essences actually are interwoven; not to invent patterns in which they might be interwoven, if only the world were different from what it is. Intelligibility is a *value*, a satisfactoriness, things have for the mind when they are *understood*. Whatever *explains* things gives the mind this satisfaction.

It is for this very reason that we cannot attribute rationality to the selective principle in itself. To suppose it to be actuated in itself by logical considerations deprives it precisely of that *explanatory* power in which logic and intelligibility consist. The world looks no more as if it were logically planned and directed, or as if it were chosen from among other possible combinations of essences with an eye to its embodying a rational plan, than it looks as if it were selected on moral grounds.

To what concept, then, of the selective principle do the exigencies of intelligibility and of logical satisfaction force us, now that moral purpose and logical planning have been ruled out? Santayana replies that the only concept that is in accord with experience and that *explains* it is the concept of a *material* principle operating without purpose, rational or moral. This provides the only pattern that fits experience and satisfies the mind, when the mind is concerned with contemplating the basis of the distinction it has to make between the possible and the actual, and the real and the ideal. It is the only explanation that works. Therefore, the selective principle which accounts for the con-

crete, *existing* universe must be conceived as material and non-teleological in character.

Moreover, this material principle is also the substratum of life and consciousness. Without it there would be nothing to be alive and to be conscious. In its absence there would be only a *realm of essences*, none of which could be entertained, any more than it could be enacted. For without a material support there could be no mind to entertain them.

The Nature of Matter. The precise nature of *matter* Santayana leaves to the physicists to explore and determine, and he is willing to go along with them in their new discoveries and hypotheses regarding its character. At the same time, he sets forth what he considers its general and presumable properties. It is spatio-temporal, extended and possessed of parts external to one another, which change their external relations, or, in other words, *move* and possibly change also their internal characters, or, in other words, are subject to *alteration*. Hence, matter is in perpetual flux, in the course of which its distributions differ from place to place and time to time, thus giving rise to distinct bodies, events, and systems.

Presumably, too, it is continuous, and the bodies and systems springing from it are more or less persistent, and their generation is an uninterrupted prolongation of antecedent processes. For all practical purposes we may also assume that its quantity remains unchanged, without addition by creation or subtraction by annihilation.

The formal structures and "unitary patterns distinguishable in the movement of things," Santayana calls *tropes*. "They are no part of the moving substance executing these patterns and overflowing them."¹ They express rather the order in which the total essential nature or form of a material object or event is disclosed in space and time—the essence descriptive of the history or career of a thing.

In many cases *tropes* are indefinitely repeated in sequences whose order appears invariable. Such habitual and regular repetitions we consider natural laws, and their constant and recurrent character we express by the word "mechanical." The assumption that the movements of matter are orderly and "mechanical" makes prediction of the future possible and reasonable. But we must not therefore conclude that *tropes necessitate* one another's occurrence. Each trope, whether or not repeated, and no matter how often it is repeated, occurs *spontaneously*. Its repetition or non-repetition is merely an expression of the fact that similar dispositions of matter *happen* to be or not to be in the same relations.

¹ *Realms of Being*, p. 305.

There is, then, "no necessity in the relation between cause and effect and no assurance that law is constant."² "No movement, no event, and no world can ensure the existence or the character of anything beyond it."³ There is no *reason* why the realm of matter should not suddenly cease to be orderly and uniform, or even to exist altogether. Indeed, owing to the elastic, fluid organic and contingent character of the flux, tropes might be embodied without precedent or repetition. After all, the contingent, uncaused, and inexplicable fact that a universe exists at all may perhaps be dispersed and exhibited in the occurrence, in all times and places, of particular events for which no reasons can be found or consequences predicted.

Organic Bodies. Among the forms enacted and the bodies produced by matter in motion and alteration are those of *animate* beings. We may then say that "matter in itself is perhaps everywhere organic or at least ready to be organized,"⁴ and that this propensity becomes explicit under certain circumstances. The distinguishing characteristics of *living* bodies lie in their ability to sustain themselves by feeding on other bodies, and to ensure repetition of their patterns or tropes by reproduction; also in their tendency to reinstate their internal equilibrium when this is upset, and to repair and restore their specific structures when these are dislocated. Inanimate bodies on the contrary have no "come-back" and lie passively where and as they are left or thrown by the pulsations of the flux, until swept away and incorporated by some new upheaval of substance.

The Psyche. This self-righting, self-maintaining, and reproducing pattern or structure of an organism, conceived as a power, is called a *psyche*⁵ by Santayana. The *psyche* comprises the organized totality of the specific functions, impulses, and drives with which each living body is endowed, and by virtue of possessing which it becomes an active force "in dynamic relations with the whole of the physical world." In short, the psyche is the form or pattern of the body translated into *action*. And it is also a predisposition of that structure to be *conscious*.

Spirit. Some living bodies, thanks to this predisposition, are *conscious* of being alive, and are *aware* of their proper natures and of their specific functions, impulses and drives. Since these activities interlock them with an outer world in dynamic relations to them, their

² *Op. cit.*, p. 303.

³ *Op. cit.*, p. 306.

⁴ *Op. cit.*, p. 334.

⁵ *Op. cit.*, p. 569.

awareness includes an external environment. This "awareness natural to animals revealing the world to themselves and it" Santayana calls *spirit* or mind. It is no more a thing or a substance than is motion or alteration or life. It is simply a condition exhibited in certain circumstances by matter.

Nor is spirit in any way a *power*. It is not an *agent*. It is not *dynamic*. It does not direct or influence in any way the operations of the body or of the physical world of which the body is a part. It is merely the body's observation of its own structure, of the impulses and powers native to that structure, and of their stimulation and exercise in their give and take with the rest of nature. The body alone is active and powerful and influential.

Desire and Will. However, the body's awareness of these things makes *interests* of them, and translates them into passions, emotions, preferences, desires, volitions and preoccupations with an external world. The organism now not only *tends* but *wants* to preserve itself, to reproduce itself, and in general to follow its natural trajectory in the flux. Its awareness is a conscious *will* to act, an entertainment of ideals as well as of ideas, and a deliberate pursuit of ends. The body and its psyche, then, not only provide the material conditions for the occurrence of consciousness; they provide, as well, its content, presenting to spirit the essences of which it is the awareness, and suggesting and limiting the direction and range of its flights among them.

So much for the *realm of matter*. Interwoven with it is the *realm of truth*, which is the sum total of all the essences that have been, are, or will be enacted and illustrated in the *realm of matter*, arranged in the spatio-temporal order of their display by the physical universe. The *realm of truth* is only a segment of the *realm of essence*, excluding as it does all essences that the *realm of matter* has failed to embody. Being simply an exhaustive description, such as an omniscient mind might entertain, of what essences happen to be enacted, and of the pattern in which they happen to be embodied, it is as contingent as existence itself. What is true just happens to be true, and nothing need be true. The *realm of matter*—the *universe*—need not have existed at all, and need not be what it is. Even in mathematics and logic, and still more in ethics and metaphysics, there are no *a priori*, necessary truths. What truth they may happen to possess consists in their describing characteristics of the material world.

To be sure, the congruity or incongruity of essences among themselves may *necessitate* some propositions of which they are the terms, and render others impossible. And spirit, laying down the rules of

the game, may play about with possible and consistent combinations in the fields of logic and mathematics and the like. But necessity or impossibility, and the coherence or incoherence of the systems devised by the mind, should not be confused with truth or falsehood, whose only test lies in whether the mind is or is not at the moment an awareness of *enacted* essences in the order in which matter incorporates them.

The Love of Truth. To distinguish enacted from unenacted essences, and to be conscious of the pattern in which matter displays those that it embodies, is to *understand* the universe and make it *intelligible*. Understanding the world is one of the prime interests that enter into the constitution of the human spirit. We naturally love and seek to possess the truth, in and for itself. Furthermore, it is only by knowing the truth about things that the organism can adapt itself propitiously to the world of which it is a part, and exert its native powers to its own advantage.

This love of truth is also the most comprehensive of human interests. It pursues and embraces all enacted essences, regardless of the bearing their embodiments may have upon the well-being of the organism in other respects. The pleasant and the unpleasant, the helpful and the harmful, the desirable and the undesirable, good and evil, beauty and ugliness, are of equal interest to the intellect, are equally intelligible, and are equally explicable by the operations of matter. And intelligence is equally displayed and satisfied in comprehending the one as well as the other.

Ignorance and Error. Still spirit in its intellectual role is subject to thwartings and disappointments. Although by nature infinitely open to all essences, and hence to the complete catalogue and pattern of those that constitute the realm of truth, its attachment to a finite organism of a particular sort, located in a particular time and place, involves it in ignorance and error. It cannot either compass or plumb the whole truth; nor can it envision clearly even so much of the truth as may happen to be within its range. Again, it is given to attributing truth to essences and patterns selected by interests that reflect other organic impulses and drives than the reaching after knowledge. It is deceived by their moral goodness or their beauty, and by its natural wish that they should belong to that segment of the realm of essence illustrated by existence, into thinking that they really are enacted in the existent universe. Hence, our awareness of the realm of truth is and must remain both incomplete within its proper sphere and apt at the same time to be invaded by essences that have no place there.

The Realm of Spirit. But these other organic impulses and drives support interests as legitimate as the desire to know what the actual universe is really like. They impel us also to envisage *ideal* combinations of essences, which, if only they were enacted by the world-mechanism, would satisfy our longings for an enacted universe that is wholly beautiful and good. We dream of worlds in which all our purposes would be fulfilled; in which our senses would be caressed by an omnipresent loveliness; in which our contact with nature and with our fellows would be perpetually harmonious; in which the character of the selective principle and its workings would be crystal clear. This ideal order, selected from the realm of essence by the combined interests of the human organism constitutes the human *realm of spirit*. But at the same time spirit recognizes the relativity of that order to human preferences, and notes that, were it itself the spirit of another type of organism, its realm might have other confines and a different constitution.

The *value* of these visions—their goodness; their beauty, their nobility, their splendor—is independent of their *practicability*. The contemplation of them alone is sufficient to satisfy the mind and to bring it peace. Otherwise there would be no poetry to life but only prose. Nor is the value of our dreams enhanced if they happen to come true. Goodness is made no better, beauty no more beautiful by being enacted in matter as well as being entertained by mind. Indeed, pure essences without material embodiment are perhaps more valuable, since there is then in their gold no dross, and the spirit is free to contemplate them unmarred by the flaws to which physical enactment subjects them.

We may indeed *imagine* them as enacted and concrete without detracting from their glory. We can paint within ourselves pictures of how they would look if only they could walk the earth. Such imagination is the content of poetry and religion. The poet images pure beauty in the face of Helen. Religious experience images goodness as a God.

However, we must never forget that such concrete images have no real existence, since matter in motion does not give them physical embodiment. They are myths and symbols, not objects and substances. We are welcome to people our ideal worlds with such beings. Indeed, their presence adds enormously to the richness of our inner life. But to pretend that they have objective existence is to degrade the values of which they are the symbols from ideals into superstitions.

Confusion of the Ideal and the Existent. Nevertheless, our philosophies and religions are continually so degrading them, and turning

poetry into prose and fancy into fact. They are not content to leave God a pure, imaginative symbol and picture of goodness painted by the spirit. They must cast him in the common clay of existence, and make of him a concrete thing, a spiritual substance, a living person. They disclaim their materialization of him and try to cover up what they have done by talking of "immaterial" existence. Such talk is mere subterfuge and fails to distinguish the accidental from the essential. The essential thing is that they have dragged God down from the realm of the subsistent to that of the existent and degraded him from an ideal into a fact. This they do not deny. Indeed, they glory in it.

Such degradation of ideals plays havoc also with the realm of existence. It is equivalent to turning aims and purposes into explanations and to substituting teleology for mechanical and efficient causation. But the moment that ideals are conceived as physically operative, existence, though it may acquire a certain shallow prettiness, becomes quite unintelligible. It does not, as we have seen, suggest as its basis a moral or a rational selective principle. To try to twist it into conformity with such a principle, or to interpret rationality and moral goodness so that they will agree with and support the existent world, leads only to grotesque results.

Finally, the degradation of the purely subsistent to concrete existence plays no less havoc with spirit itself. It can be achieved only by a confusion of values and of aims. Intelligibility is a value, and scientific explanation is an attempt to contemplate that value in experience. But intelligibility is not moral value or esthetic value. Nor does the introduction of intelligibility make experience more satisfying from the moral and esthetic point of view. Disease is no less disease, deformity is no less deformity for being understood.

In the same way, neither the goodness nor the beauty in the world can be used as a means for understanding *why* the world exists. So to employ them is to allow moral prejudice and purpose to enter into our attempt to determine the nature of the existent. If we do this, we are strangling that attempt in the cradle and defeating it from the start. We are confusing the ideal conditions under which we would like to live with the conditions that have given us birth. Such confusion transforms the empyrean above us into the earth beneath us. It turns the whole universe upside down.

Avoidance of This Confusion a Mark of Intelligence. It is the mark of a reasonable and reasoning organism to avoid such confusion and to distinguish clearly from one another its different aims, the values that they imply, and the concepts in which they terminate. The in-

telligent man will not expect beforehand that the concepts which make his experience intelligible will also make it morally and esthetically desirable. He will not feel that the essences in the contemplation of which his interest in the beautiful and the good is satisfied must also serve to explain actual existence and render it intelligible. He will not confuse moral and esthetic desirability, and be predisposed to insist that nothing immoral can be beautiful or that nothing esthetically unattractive can have ethical value. Nor will he mistake the things that make life worth living for the things that give rise to life. He will not confuse justifications with causes and turn ends into origins.

On the other hand, he will not impute ideal values, except explanatory and intelligible ones, to grounds and causes simply because they account for what exists. He will not, for example, argue that the circumstances in which consciousness arises must themselves be conscious, or that the enabling conditions of the contemplation of moral and esthetic ideals must themselves be morally good since the "lower" cannot account for the "higher." He will keep the different realms of value, the essences displayed in them, and the concepts operative in them, as sharply demarcated as he can. He will realize that truth, goodness, and beauty are not one but three, in many respects divergent, hostile, and irreconcilable in their ways towards man and in the service and the worship they exact from him. He will see that because they are three, not one, the moralist and the artist must be often at swords' points with each other, and must find a common object of detestation in the unsugared and often bitter truth. So, too, he will understand why scientific discovery and artistic creation are alike expurgated by the moral censor, and why scientific facts and ethical restrictions are denied and flouted by the poet.

The Life of Reason. At the same time, it is the mark of an organism dominated by *reason* to recognize also that there is a region both in the world of essences and in its own experience where these values coincide. Existence is not only intelligible. Much of it also is so constructed as to be naturally a commodious and comfortable house of life in which we can dwell happily, move about freely, and express ourselves after the fashion our natures dictate. Much of its furniture is beautiful. There is much in it we would not alter if we could. Moreover, we may extend in our imagination this amity of values beyond enacted fact and retain it in the wider realm of essences open to our contemplation.

It is the supreme function of reason to introduce into experience all the harmony of value that can be introduced. It is its business and its

pleasure to people the mind with essences that can be contemplated together without conflict, even when the cosmic mechanism fails to embody them, or embodies them at odds with one another. The greatness and the dignity of reason lie in the infinite scope of its vision, in its ability to entertain all essences, and in its genius for entertaining so wide and so varied a group of them. This flair for entertainment it owes, as we have seen, to the diversity of the organic interests upon which it rests.

The different subjects of human interest and value are introduced to one another by reason. It is acquainted with their origins, sees through and discounts their pretensions, and knows what they are good for and what they are not. It sees, for example, that religion and most metaphysics are poetry, not descriptions of existent fact, and are therefore no good as explanations of the world. But it does not therefore disparage their ideal values. Though they are bad science, they are good poetry, and the reasonable man does not allow their failure in the one role to interfere with his appreciation of their excellence in the other. Or again, because a good explanation may be morally distressing, he does not for that reason distrust its scientific validity.

The Confinement of Human Interests to Their Proper Spheres. Stripped of their false claims and their superstitions, and persuaded to be *natural*, all our aims and values turn out to be harmonious enough. Science no longer quarrels with poetry and religion and metaphysics, when once they have admitted themselves to be what reason takes them for. It is polite to morals and to art, as soon as reason has assured it that they have no intention of invading its sphere and stepping on its toes.

So, too, religion, and poetry, and art, and ethics do not oppose science after reason has made it clear to them that their place in life is not to provide its causes and its grounds, and to make it intelligible, but to enrich it with other values that are equally important in making it worth living, and that they alone can provide. Nor will they object to being themselves explained scientifically once they see that the soil in which a thing is rooted and grown has nothing to do with the fairness of its flowering. It is not a matter to be ashamed of that they spring from the *natural*, organic needs and impulses of the human animal, which in their turn are compounded of the material substance that is the stuff of all existence.

Once reconciled to their natural origin and to the different stations to which it has pleased nature to call them, science, and religion, and art, and morals, and all the rest get on amicably in any rational mind

that happens to be their host. Their interchange of ideas, in which self-knowledge has been substituted for self-deception, constitutes a discourse in which all the essences contemplated by the mind are intricately interwoven into a single harmonious pattern which gives due expression and satisfaction to every human need and interest. The art of such interweaving of immortal themes constitutes the *life of reason*.

X. PROSPECT

The New Discoveries in Physics and Psychology. The epoch that has brought our history of philosophy to a close has seen two simultaneous revolutions in science, one in physics, the other in psychology, which may well be as fraught with important consequences to the future developments of philosophic thought as have been the Copernican and the Darwinian upheavals. In physics Einstein's theory of time as a "fourth dimension," of the relativity of motion, of the non-Euclidean nature of space, and of the equivalence of the mass of a body with its momentum, have brought into question many of the fundamental principles of the old physics. To this has been added the development of the *quantum* theory based upon the discovery that energy, far from delivering itself in a continuous flow, comes in irregular beats and puffs for whose separated and capricious occurrence no reason can be found or even conceived.

Further examination of this disorderly situation has revealed to Heisenberg and Schrödinger a new state of affairs called the "principle of uncertainty." According to this principle it proves impossible in the first place to determine with mathematical precision either the position or the orbit of an electron, and in the second, even to approximate an exact formulation without at the same time proportionately decreasing the certainty of our computation of the electron's momentum. The physicist thus finds himself between the devil and the deep sea. Every step towards the attainment of the one goal, he knows beforehand, must of mathematical necessity carry him further away from the other. The electron simply refuses to lend itself to any attempt to apply to it the one sort of measurement, without making the other increasingly impossible of application. It has a disconcerting way of changing orbit and position without warning, and evades all calculation beforehand of how it is going to behave.

These discoveries appear at the moment to outmode the stock-in-trade of the conventional physics. They suggest that the old, classical concepts of space and time, of mass and motion, of the conservation

of energy and the indestructibility of matter, of causation and necessity, and of the amenability of physical occurrences to mathematical formulae, are no longer fundamental and reliable. On the contrary, the old concepts would seem to be superficial and inadequate.

Their Possible Effects upon Philosophy. Any philosophy, then, which finds in the nature and the conduct of the physical world some indication of the character of the Real can scarcely avoid a revision of the inferences it has hitherto been drawing. Reality, so far as the physical sciences introduce us to it, can no longer be thought of as the orderly, stable, uniform, causally determined and mathematically calculable affair it was of yore. It rather suggests a core of caprice, and chance, and spontaneity, and indeterminism, in whose sheer madness there is no method. The solid, ponderable aspects and the ponderous and calculable movements that constitute its grosser physical aspects are superficial and shallow. They are a lava-crust of dubious depth floating on a sea of molten, tossing, bubbling and seething being, if such it can be called.

The second revolution, which is of equally great import, is the overturn in psychology effected by Freud and the psychoanalytic school. Formerly, mind was regarded as essentially reasonable and moral. But those days seem to be over. Under psychoanalysis it has revealed quite a different nature, and a nature, curiously enough, not unlike that revealed in matter by the probings of the new physics. Its rational and moral aspects have turned out, also, to be superficial and shallow rather than profound. They represent, indeed, only what the censor permits to be published of an autobiography that is essentially capricious, blindly impulsive, unmoral and irrational in the original text and in the spirit in which it is composed.

It may be argued that the new physics and the new psychology are not revolutions, but mere rebellions which will be put down without permanent damage to our hitherto established ideas. Perhaps. But at the moment there is no reason to suppose that their revelations will be more easily discarded and any less lasting and profound in their effects upon our thinking than those of the Copernican and Darwinian theories. It may well be that the physicist and the psychologist of the future will be as little able to ignore or to reject them as the astronomer of today is able to pass by Galileo and return to Ptolemy, or the contemporary biologist to flout the doctrine of evolution and maintain the theory of special creation of fixed species. In that case philosophy will have to make startling and far-reaching adjustments. Probably none of us will live to see the effects of the new physics and

the new psychology upon the philosophy of the future. Certainly I shall not. I confess, however, to getting no little amusement out of allowing my fancy to lend an ear to the singular, malicious music of their possible repercussions. Still, when all is said and done, it remains written of the future of philosophy as of the future of all else, "These things lie on the knees of the gods."

BIBLIOGRAPHY

Unfortunately the great *History of Modern Philosophy* by Kuno Fischer has only been translated in part from the German. The shorter histories of Cushman, Falkenberg, Höffding, Rogers, Thilly, Ueberweg and others may be consulted. Comparatively few references have been given, and these for the most part to short and non-technical discussions.

THE RENAISSANCE

- W. Boulting, *Giordano Bruno*, 1916.
J. Burckhardt, *The Civilization of the Renaissance in Italy*, 8th ed., 1921.
E. McCurdy, *The Mind of Leonardo da Vinci*, 1928.
J. L. McIntyre, *Giordano Bruno*, 1903.
Ralph Roeder, *Man of the Renaissance*, 1933.
Henry Osborn Taylor, *Thought and Expression in the Sixteenth Century*, 2nd ed., 1930.

DESCARTES, SPINOZA AND LEIBNITZ

- H. W. Carr, *Leibnitz*, 1929.
A. B. Gibson, *The Philosophy of Descartes*, 1932.
H. J. Joachim, *A Study of the Ethics of Spinoza*, 1901.
R. McKeon, *The Philosophy of Spinoza*, 1928.
S. H. Mellone, *The Dawn of Modern Thought*, 1930.
J. Merz, *Leibniz*, 1884.
F. Pollock, *Spinoza, his Life and Philosophy*, 1899.

BACON, HOBBS, LOCKE, BERKELEY AND HUME

- S. Alexander, *Locke*, 1908.
E. A. Burt (ed.), *English Philosophers from Bacon to Mill*, 1939.
K. Fischer, *Francis Bacon of Verulam*, 1857.
A. Campbell Fraser, *Berkeley*, 1899.
— *Locke*, 1901.
G. D. Hicks, *Berkeley*, 1932.
W. Knight, *Hume*, 1905.
B. L. Laing, *Hume*, 1932.
J. Laird, *Hobbes*, 1934.
B. Landry, *Hobbes*, 1930.
C. R. Morris, *Locke, Berkeley, Hume*, 1931.
J. Nicol, *Bacon*, 1888-1889.

Norman Kemp Smith, *Philosophy of David Hume*, 1941.
A. E. Taylor, *Hobbes*, 1908.

KANT, FICHTE, HEGEL, SCHOPENHAUER

R. Adamson, *Fichte*, 1881.
E. Caird, *Hegel*, 1896.
K. Fischer, *Arthur Schopenhauer*, 1893.
A. D. Lindsay, *Kant*, 1934.
W. Wallace, *Kant*, 1882.
T. Whittaker, *Schopenhauer*, 1909.
H. Zimmern, *Schopenhauer, his Life and Philosophy*, 1932.

EARLY NINETEENTH CENTURY BRITISH PHILOSOPHY

J. McCosh, *Scotch Philosophy*, 1875.
W. R. Sorley, *History of English Philosophy*, 1937.
L. Stephen, *The English Utilitarians*, 1902.
J. Veitch, *Hamilton*, 1882.

THE POSITIVISTS

J. S. Mill, *Auguste Comte and Positivism*, 4th ed., 1891.
J. Watson, *Comte, Mill, and Spencer*, 1895.

CONTEMPORARY PERIOD, GENERAL WORKS

J. A. Gunn, *Modern French Philosophy*, 1922.
H. Höffding, *Modern Philosophers*, 1915.
C. E. M. Joad, *Introduction to Modern Philosophy*, 1924.
J. H. Muirhead, *Contemporary British Philosophy* (a compilation of personal statements). First series, 1924. Second series, 1926.
R. B. Perry, *Present Philosophical Tendencies*, 1912.
— *Philosophy of the Recent Past*, 1926.
J. W. Riley, *American Thought*, 1923.
A. K. Rogers, *English and American Philosophy since 1800*, 1923.
Dagobert Runes (ed.), *Twentieth Century Philosophy*, 1944.
J. Wahl, *The Pluralistic Philosophies of England and America*, 1925.
W. K. Wright, *A History of Modern Philosophy*, 1941.

LIST OF SOME OF THE WORKS OF PHILOSOPHERS OF THE PRESENT AND THE RECENT PAST

LATE NINETEENTH CENTURY

British and American Philosophers

- B. Bosanquet, *Logic*, 1888.
— *History of Aesthetic*, 1892, 1904.
— *The Principle of Individuality and Value*, 1912.
— *The Value and Destiny of the Individual*, 1913.
F. H. Bradley, *Ethical Studies*, 1876.
— *The Principles of Logic*, 1883.
— *Appearance and Reality*, 1891.
G. H. Howison, *The Conception of God* (with Royce and others), 1897.
— *The Limits of Evolution and other Essays Illustrating the Metaphysical Theory of Personal Idealism*, 1901, 1904.
W. James, *Principles of Psychology*, 1890.
— *The Will to Believe*, 1897.
— *Varieties of Religious Experience*, 1902.
— *Pragmatism*, 1907.
— *A Pluralistic Universe*, 1909.
J. Royce, *The Religious Aspect of Philosophy*, 1885.
— *The Spirit of Modern Philosophy*, 1892.
— *The Conception of God* (with Howison and others), 1897.
— *The World and the Individual*, 1900-1901.
— *The Philosophy of Loyalty*, 1908.
— *The Problem of Christianity*, 2 vols., 1913.

Continental Philosophers

- E. Boutroux, *On the Contingency of the Laws of Nature*, 1916.
von Hartmann, *Philosophy of the Unconscious*, 1886.
R. H. Lotze, *Microcosmus*, 1884.
— *Logic*, 1889.
— *Metaphysics*, 1884.

516 LIST OF WORKS OF PHILOSOPHERS

- E. Mach, *The Science of Mechanics*, 1893.
 — *Analysis of Sensation*.
 F. Nietzsche, *The Birth of Tragedy*, 1910.
 — *Human, All Too Human*, 1909-1911.
 — *Joyful Wisdom*, 1910.
 — *Thus Spake Zarathustra*, 1909.
 — *Beyond Good and Evil*, 1907.
 — *The Genealogy of Morals*, 1910.
 — *The Will to Power*, 1909-1910.
 F. C. S. Schiller, *Riddles of the Sphinx*, 1891.
 — *Humanism*, 1903.
 — *Studies in Humanism*, 1907.
 — *Logic for Use*, 1929.
 — *Must Philosophers Disagree?*, 1934.

WORKS OF AMERICAN AND BRITISH PHILOSOPHERS STILL LIVING

- S. Alexander, *Moral Order and Progress*, 1889.
 — *Space, Time and Deity*, 1920.
 — *Beauty and Other Forms of Value*, 1933.
 J. Dewey, *The Study of Ethics*, 1894.
 — *The Significance of the Problem of Knowledge*, 1902.
 — *Studies in Logical Theory*, 1903.
 — *Essays in Experimental Logic*, 1916.
 — *Democracy and Education*, 1916.
 — *Experience and Nature*, 1925.
 — *Human Nature and Conduct*, 1922.
 — *The Quest for Certainty*, 1929.
 — *A Common Faith*, 1934.
 — *Art as Experience*, 1934.
 — *Logic, The Theory of Inquiry*, 1938.
 B. Russell, *Critical Examination of the Philosophy of Leibnitz*, 1900.
 — *Principles of Mathematics*, 1903.
 — *Principia Mathematica* (with A. N. Whitehead), 1910-1913.
 — *Our Knowledge of the External World*, 1914.
 — *Analysis of Mind*, 1921.
 G. Santayana, *Life of Reason*, 1905, last ed. 1932.
 — *The Sense of Beauty*, 1896.
 — *Character and Opinion in the United States*, 1924.
 — *Dialogues in Limbo*, 1925.
 — *The Genteel Tradition at Bay*, 1931.

G. Santayana, *Interpretations of Poetry and Religion*, 1905.

— *Three Philosophic Poets*, 1935.

— *Scepticism and Animal Faith*, 1923.

— *The Realms of Being*, 1942.

A. N. Whitehead, *An Inquiry Concerning the Principles of Human Knowledge*, 1919.

— *The Concept of Nature*, 1920.

— *Science and the Modern World*, 1925.

— *Process and Reality*, 1929.

— *Religion in the Making*, 1927.

— *Adventures of Ideas*, 1933.

CHRONOLOGY

- Fall of Constantinople. Beginning of the Italian Renaissance, of the liberation of philosophy from Christian theology, and of independent speculation. 1453.
- Leonardo da Vinci (Italian)—1452-1519.
- Savonarola (Italian)—1452-1498.
- Machiavelli (Italian)—1469-1527.
- Copernicus (German astronomer)—1472-1543.
- Luther (The Protestant Reformation)—1483-1546.
- Montaigne (French)—1533-1592.
- Giordano Bruno (Italian)—1548-1600.
- Francis Bacon (English)—1561-1626.
- Galileo (Italian astronomer and physicist)—1564-1641.
- Campanella (Italian)—1568-1639.
- Hobbes (English)—1588-1679.
- Gassendi (French)—1592-1655.
- Descartes (French)—1596-1650.
- Pascal (French)—1623-1662.
- Geulincx (Belgian)—1624-1699.
- Spinoza (Dutch Jewish)—1632-1677.
- Locke (English)—1632-1704.
- Malebranche (French)—1638-1715.
- Newton (English astronomer and physicist)—1642-1727.
- Leibnitz (German)—1646-1716.
- Vico (Italian)—1668-1744.
- Wolff (German)—1679-1754.
- Berkeley (Irish)—1684-1753.
- Voltaire (French)—1709-1751.
- Jonathan Edwards (American)—1703-1788.
- De la Mettrie (French)—1709-1751.
- Reid (Scotch)—1710-1796.
- Hume (Scotch)—1711-1776.
- Rousseau (French)—1712-1778.
- Helvétius (French)—1715-1771.
- Condillac (French)—1715-1780.
- Holbach (German)—1723-1789.
- Kant (German)—1724-1804.
- Bentham (English)—1747-1832.
- Fichte (German)—1762-1814.
- Maine de Biran (French)—1766-1824.
- Hegel (German)—1770-1831.
- James Mill (Scotch)—1773-1836.
- Schelling (German)—1775-1854.
- Herbart (German)—1776-1841.
- Hamilton (Scotch)—1788-1856.
- Schopenhauer (German)—1788-1860.
- Cousin (French)—1792-1867.
- Rosmini (Italian)—1797-1855.
- Comte (French)—1797-1857.
- John Stuart Mill (Scotch)—1806-1873.
- Gioberti (Italian)—1801-1852.
- Ravaisson (French)—1813-1900.
- Renouvier (French)—1815-1903.
- Lotze (German)—1817-1881.
- Karl Marx (German)—1818-1883.

Spencer (English)—1820-1903.
Haeckel (German)—1834-1919.
Hartmann (German)—1842-1906.
James (American)—1842-1910.
Nietzsche (German)—1844-1900.
Vaihinger (German)—1852-1933.
Meinong (German)—1853-1920.
Royce (American)—1855-1916.
Bergson (French)—1859-1941.
Alexander (English)—1859-1938.

Dewey (American)—1859-
Husserl (German)—1859-1938.
Whitehead (English)—1861-
Santayana (Spanish, educated in
America)—1863-
Croce (Italian)—1866-
Schiller (English)—1864-1937.
Russell (English)—1872-
Moore (English)—1873-
Gentile (Italian)—1875-1944.

GLOSSARY OF COMMON TERMS¹

ANALYTIC JUDGMENT. A proposition in which the predicate is logically implied by the subject to which it is attributed, and therefore gives us no new information about the subject; as for example, "The radii of a circle are of equal length." (The radii of a circle *must* of their very nature be of equal length. If they were not, they would not be the radii of a *circle*, but of an ellipse or an oval.) Opposed to *synthetic judgment*, q.v.

ANTINOMY. Generally speaking, any real or apparent conflict between conditions producing the same result, or between the consequences of two equally demonstrable and convincing lines of reasoning. Used by Kant of the contradictions that arise from our ability to demonstrate with equal cogency that the universe must be both finite and infinite, caused and causeless, wholly determined and yet admitting of freedom, or the like.

A POSTERIORI. Used of knowledge and principles regarded as derived from or dependent upon experience. Opposed to *a priori*, q.v.

A PRIORI. Used to designate knowledge and principles of thinking that are not derived from experience and cannot be explained by experience, even if their only application is to experience. Cf. The Kantian categories. Such knowledge and principles are logically, but not temporally and psychologically, *prior* to experience. Opposed to *a posteriori*.

ARCHETYPE. The original, or model, of which other things are regarded as the copies; as, for example, the Platonic Ideas and the idéas of things existing according to Berkeley in the mind of God.

CATEGORY. Term applied to the widest and most universal concepts in which the mind habitually docket its thoughts and judgments. Used by Kant to designate the *a priori* forms under which all experience must be subsumed by the understanding, if it is to be rendered intelligible and is to be understood.

CONTINGENT. Used to describe anything that can be conceived equally well as existing or not existing. Employed of future events whose

¹ The following definitions are based upon *Vocabulaire de la Philosophie* by André Lalande. Felix Alcan, Paris, 1932.

occurrence, though regarded as possible, is not regarded as necessitated and determined by the present existent situation. Used also of coincidence as contrasted with cause and effect, and of logical propositions whose truth does not rest upon the necessities of rational thinking, but must be verified in and by experience.

COSMOLOGICAL ARGUMENT (PROOF). Argument for the existence of God, founded upon the necessity of assuming a cause and reason for the existence and the nature of the universe.

COSMOLOGY. Study of the constitution of the sensible universe as a whole and of the totality of the general laws that sum up its behavior. The term *rational cosmology* is used by Kant to designate the totality of the questions concerning the origin and nature of the world regarded as a reality.

DEDUCTION. The process by which the mind passes from one or more propositions, accepted without denying or affirming their truth, to the conclusion logically implied in and necessitated by them. Used by Kant to designate the a priori applicability of the categories to sense experience, and called by him *transcendental* in order to oppose it to a discovery of the categories based upon the observation of experience.

DISCURSIVE. A term applied to *processes* of thinking which reach their conclusions step by step through a series of intermediary operations.

DUALISM. In its widest usage applied to any theory that in any field of investigation reduces the variety of its subject-matter to *two* irreducible principles; as, for example, the natural and the supernatural, good and evil, will and intellect. Used in metaphysics of any system that reduces the whole universe to two such principles, as, for example, the Platonic Ideas and Matter, Mind and Matter, the Determinate and the Indeterminate.

EMPIRICISM. The doctrine that all ideas and categories are derived from sense-experience (a posteriori), that knowledge cannot extend beyond experience, and that all knowable Reality must be either actually experienced or capable of being experienced. Opposed to "innate ideas," a priori structures of the mind and forms of thinking, entities, material or immaterial, transcending experience, and the pretensions of reason to discover truths and beings existing outside and apart from sense-experience.

EPI-PHENOMENALISM. The teaching that consciousness is a mere accessory and accompaniment of physiological processes, whose presence or absence makes no difference to these processes, and whose activity

is powerless to interfere with them and to influence them in any way whatsoever.

EPISTEMOLOGY. Used loosely as synonymous with "theory of knowledge," and therefore as a designation of the study of the nature, possibilities, and limitations of the activity of knowing. Employed more correctly of the critical study of the principles, hypotheses, and results of the different sciences, with a view to determining their logical grounds, their value, and their objective implications.

ESSENCE. Used in metaphysics to designate that which makes a thing what it is and nothing else, in contrast with the qualities, or *accidents*, which attach superficially and for the time being to the thing and may be detached from it. Contrasted also with the *existence*, or factual being and "thereness" of a thing in and for itself, or its presence as an *experienced* fact. By some the essence of a thing is lodged in that which it shares in common with other things of the same sort (e.g., Plato); by others in that which makes it individual and concrete (e.g., Aristotle).

ETERNITY. ETERNAL. Used loosely as a synonym for "everlasting duration," but more specifically and properly for that which exists outside of and without reference to duration, and is therefore *timeless*. For example, the Platonic Ideas, the Christian God, the Pythagorean proposition, and any absolute and universal truth, do not "go on" and continue and endure in time. They exist or subsist in a manner that the existence or the non-existence of time and duration does not affect.

EXISTENCE. Used of the factual being and "thereness" of a thing, either independently of all actual and possible awareness and knowledge of it, or as an *experienced* fact. Opposed to *essence*, which merely describes the nature of a thing, but does not at the same time indicate that the thing described is "there" either in itself or in experience. Used by some philosophers in a narrower sense than *being*, to denote enacted, concrete, individual being in contrast to the being of universals, logical propositions and the like to designate which the term *subsistence* is sometimes employed.

FREE WILL OF INDIFFERENCE (INDETERMINISM). Term used by those who consider that the will exercises itself independently of all determination whatsoever, be it by instinct or impulse or passion or rational and moral motives or character or the *self*, and has no other "cause" than a blank, unmotivated power to decide and will, whose choices and volitions are explicable simply and solely by its mere existence

and exercise, and require no other reasons of any sort to account for them.

FREE WILL OF SELF-DETERMINATION. Used of such decisions and behavior that the agent regards as determined by no compulsion of external forces, but simply by his own essential nature, or *self*. This *self* may be identified with reason and reflection and pursuit of the good, in which case ignorance, impulse, folly, passion, and the pressure of the instincts appear as external constraints upon volition and behavior expressive of the true self. But to establish moral and legal responsibility it is sufficient to show that the agent is not forced by anything *outside himself* to act as he does.

IDEALISM. Used metaphysically of any system that reduces all existence to terms of thought, whether of a single, absolute thinker (absolute, or monistic, idealism) or of a plurality of individual thinkers (pluralistic idealism; personalism).

INDUCTION. The process by which the mind proceeds from the observation of particular cases and from propositions of restricted scope to a single proposition or a smaller number of propositions which cover and imply the particular cases and propositions in question. For example, the laws of physics are "induced" from the observation of the behavior of physical phenomena.

MATERIALISM. Doctrine that all the aspects of the universe, including human life, can be reduced to and explained in terms of matter in motion. The term is also applied to systems that, although they regard consciousness as irreducible to terms of physical energy, still consider it dependent upon matter for its existence and find its processes and successive states explicable only when correlated with physiological processes and thus submitted to the laws governing physical motion and energy.

MECHANICAL. Used of any theory that dispenses with occult powers, design, purpose, final causation and determination of the part by the whole, and substitutes for them determination by invariable antecedent conditions as the principle according to which the occurrence and behavior of phenomena are to be explained.

METAPHYSICS. In its popular and general sense, investigation of the essential and absolute nature of Reality as a whole. Original meaning, "what comes after physics," and used originally of the works of Aristotle that followed his *Physics* in the collection of his works made by Andronicus. Used by Aquinas to designate knowledge of *supernatural* entities; by the Cartesians, of *immaterial* entities; by Kant, of constructive attempts to know the nature of things as they

are in themselves, and of theories regarding objects of faith, like God, freedom and immortality; by Bergson and other intuitionists, of the immediate acquaintance with the Real given by direct intuition of its nature, as contrasted with the falsifications of the nature of the Real by the intellectual processes.

MONISM. Term applied to any philosophic system that regards the universe in all its aspects as reducible to, and the representation of, a single principle, as, for example, mind or matter or energy or "the unconscious."

MYSTICISM. The doctrine that the nature of Reality is *ineffable*; that is, inaccessible through either the senses or the intellect, indescribable in any of the terms and categories at the command of ordinary human consciousness, and approachable only in and through a special state of *ecstasy* which transcends every form and activity, sensible, emotional, intuitive, volitional, and rational of normal human experience. In this ecstasy all sense of separateness, apartness, and difference of the self from the nature of the Real disappears, self-consciousness is obliterated, and the individual is either actually merged and made one with the Real, or engrossed in a beatific vision of it in which the distinction between subject and object, though still existent metaphysically, is no longer experienced.

The term is also applied to the special ascetic discipline regarded as a prerequisite to the attainment of *ecstasy*.

In a lower and more popular sense, it is also frequently extended to such attitudes and beliefs as rely upon ordinary human feeling, intuition, and experience of volition, rather than upon empirical observation and reasoning, as guides to the nature of the Real.

NATURALISM. The teaching that the universe needs no supernatural origin or explanation, but is self-explanatory or self-existent; that its behavior is not teleologically explicable by final causes and purposes; that human life and behavior are in no way exceptional and outside the course of natural events, and are to be explained by the same principles as obtain throughout the rest of nature; and that human values, moral ideals, and conduct are determined by the organic structure and needs characteristic of the human species.

ONTOLOGICAL ARGUMENT (PROOF). Argument for the existence of God based upon the logical analysis and definition of his nature. The idea of a perfect being, it is argued, is necessarily the idea of an existent being, since a being that lacked existence would not be perfect. Reason demands the idea of an *ens realissimum*, of a complete, finished, sum total of being, lacking in nothing. Therefore logic and

reason demand that this idea shall have enacted existence. Used by Anselm. First so called by Kant.

ONTOLOGY. Used generally as synonymous with metaphysics. Original sense, the science or knowledge of *being* as such.

PANTHEISM. The teaching that God and the universe are one and the same thing. Pantheism may be idealistic (Hegel, Fichte) or materialistic (Holbach, Diderot) or naturalistic (Spinoza) or moral (the Stoics) or mystic (Plotinus, Scotus Eriugena, Bruno) according to the view taken of the essential character of the Real.

PARALOGISM. False reasoning. Employed by Kant to designate the incorrect reasoning by which the substantial, simple, and personal character of the soul is "demonstrated," and by which Berkeley's equation of *existence* with perceiving and being perceived is "established."

PHENOMENON. That which appears to consciousness. That which is perceived. Used sometimes of the "brute," fluid content of consciousness, sometimes of the facts, objects, and events into which this content coagulates. Used by Kant to designate any "object of possible experience"; that is, everything that appears under the forms of space and time and in the ways determined by the categories of the understanding.

PLURALISM. Used of any system according to which Reality is composed of *many* individual, independent, ultimate constituents, which cannot be reduced to terms of one another, or to aspects of some single common principle underlying them. Cf. Herbart, Lotze, James, Schiller, and others.

PSYCHO-PHYSICAL PARALLELISM. The doctrine that every physical event is accompanied by and corresponds to a psychical event and *vice versa*. (Cf. Spinoza.) Used more particularly of the teaching that every psychical event accompanies and corresponds to a physiological event (but not that every physical event has necessarily a psychical concomitant). The relation between the two series of events is not regarded as causal, but simply as concomitant. Mental states do not cause physical states, or *vice versa*. They merely accompany each other.

REALISM. Most generally used at present of any system that denies the possibility of reducing the universe to terms of mind and thought, and that maintains that something would still exist, if all consciousness whatsoever was extinguished. From this point of view experience and knowledge are of an *external independent world*. Used also of the Platonic doctrine that the Ideas are independent of and

more real than sensible objects, and of the Scholastic teaching derived from Plato, that universals exist independently of the particulars that enact them.

SOLIPSISM. A form of idealism that considers any individual thinker justified in maintaining that he and his experiences alone exist, and that all other seeming centers of consciousness are merely figments of his own conscious activity, like the dreams in which other people figure. This doctrine, it is argued, cannot be disproved, and is the only *logical* conclusion that can be drawn from the reduction of so called external and objective reality to terms of consciousness and experience.

SUBJECT. That of which qualities are predicated and in which they are supposed to inhere. Used also more particularly, and as contrasted with *object*, of that which experiences and thinks and unifies the multiple and varied content of consciousness into an objective world of *things*.

SUBSISTENCE. Used by some modern philosophers of the kind of being possessed by universals, logical propositions, formulae, types, laws and the like, as distinguished from the *existence* possessed by concrete particular objects. Used originally and more generally of the kind of being attributed to substances as contrasted with that of qualities and accidents, and of the duration and persistence of a thing despite the change and disappearance of its qualities.

SUBSTANCE. That which exists in and by itself and not as a modification or relation of anything else. That is, a thing which remains as the permanent and self-identical support of the changes and of the different and successive qualities by which the thing is modified. Cf. Spinoza and Locke.

SUBSTRATUM. Used frequently as a synonym for *substance* in the sense of a permanent, self-identical support for modes and accidents and changes. Cf. Locke and Berkeley. Not synonymous, however, with *substance* in the sense of that which exists in and by itself.

SYNOPTIC. Used to designate an act of thought or point of view in which a whole and all its constituents are grasped and seen together simultaneously in their entirety and in their necessary connection with, and implication of, one another. Cf. Spinoza's vision "under the aspect of eternity."

SYNTHETIC JUDGMENT. A proposition in which the predicate is not necessarily implied by the subject to which it is attributed; as, for example, "The orbits of the planets are ellipses." (There is no logical reason why planetary orbits should not be circular instead of ellip-

tical. Hence their elliptical form is not logically implied.) Opposed to *analytic judgments*, q.v.

SYNTHESIS. The operation and result of piecing together comparatively simple elements into larger and more complicated wholes. Used by Hegel and his followers of the fusion of opposed ideas (thesis and antithesis) in a new, "higher" idea or proposition in which their contradiction is overcome and their essential identity is revealed.

TELEOLOGY. TELEOLOGICAL. Descriptive of attempts to explain events not by their antecedents but by their results and purposes; that is, not by efficient but by final causation. The explanatory purpose may be regarded as external (argument from design) or internal (biological ends; entelechies). Used also of attempts to explain the nature and arrangement of the parts by the whole of which they are the constituents; as, for example, in the case of organic bodies. Cf. Kant.

TRANSCENDENTAL. Used by the *Scholastics* of attributes even more general than the Aristotelian categories, as, for example, unity, truth, goodness. Used by *Kant* of the a priori categories and other structure of the thinking apparatus, and also to designate attempts to extend the categories and procedures valid for human experience to the world of things-in-themselves and this makes them *transcend* experience. Used also of all systems that consider experience to be governed by a priori forms and principles. Name applied to the Concord school of which Emerson was the chief representative.

TYCHISM. Term suggested by C. S. Peirce for the theory, expounded by him, that *absolute chance* exists and makes itself evident in the world-process. In other words, not only does the word "chance" stand for our ignorance of the causes of many things, but many events actually *have no causes*, and *happen for no reason whatsoever*. Peirce considered biological processes to be obviously *tychistic* in character.

INDEX

- Absolute, the, Bosanquet on, 426;
 Bradley on, 425; Croce on, 479 f.;
 Green on, 423; Hegel on, 304, 318 f.;
 Royce on, 455 f.; Schelling on,
 299 f.; Schopenhauer on, 341, 345 f.
 Absolute Ego, Fichte on the, 280,
 282 ff.
 Absolute Idea, 368; Hegel on, 305,
 318 f., 333
 Absolute Idealism, 273 ff.
 Absolute Spirit, Hegel on, 306, 310 f.,
 332
 Abstract ideas, Schopenhauer on, 342
 Activity, Fichte on, 284; Hegel on,
 307
 Actuality, Hegel on, 315
Addresses to the German Nation
 (Fichte), 276
Advancement of Learning (Bacon),
 41
Aenesidemus (Schulze), 270
A General Natural History, etc.
 (Kant), 217
 Agassiz, Louis, 454
Age of Reason (Paine), 187
 Alberti, Leon Battista, 10 f.
Alciphron dialogues (Berkeley), 142,
 150
 Alchemy, 27
 Alcott, Bronson, 453
 Alexander, S., 495 f.
 Altruism, Mill on, 402
 American philosophy, 451 ff.
 Analogy, Locke on, 137 f.
Analysis of the Phenomena of the
 Human Mind (J. Mill), 392
 Analytic, Kant's transcendental, 221 f.
 Anarchism, Godwin on, 187
 Anglican Church, independence of, 21
Anstösse, Fichte on, 281 f.
 Antinomies, Kant on, 235 ff., 252 f.,
 261 f., 264 f.
 Apperception, Kant on, 224
 Archimedes, Latin translation of, 29
 Aristotle, and Christian doctrine, 29;
 Bacon decries, 44; rediscovery of, 28
 Arnauld, Marie Angélique, 69
 Art, Fichte on, 287 f.; Greek, 211;
 Hegel on, 310, 329 f.; Kant on,
 259 f.; Nietzsche on, 444 f.; Renais-
 sance interest in, 8; Schelling on,
 297; Schopenhauer on, 348 f.; see
 also Beauty
 Association, Hume on, 160 f.
 Associational psychology, 391
 Associationism, 391 f.
 Astronomy, and Bruno, 31 f.; and
 philosophy, 17 f.; Descartes on, 66 f.;
 new, 17 f., 380
 Attributes, infinite, Spinoza on, 75, 78
 Avenarius, 416
 Bacon, Francis, 40 ff.; career of, 40 f.;
 decries Aristotle, 44; extensive in-
 terests of, 41; "idols" of, 42; mate-
 rialism of, 44; method of induction
 of, 43; on poetry, 45; philosophy
 of, 42 f.; works, 41
 Bain, Alexander, 410 f.
 Baur, 368
 Bayle, 169
 Beauty, Fichte on, 287 f.; Hegel on,
 329; Kant on, 254 ff., 261 f.; see also
 Art
 Beck, 271
 Becoming, Hegel on, 313, 318
 Behavior, right, Kant on, 247 f.
 Being, Hegel on, 313
 Belief, Fichte on, 289 f.; Hume on,
 157, 166; see also Christianity, God,
 Religion
 Beneke, 366
 Bentham, Jeremy, 189, 391 f.
 Bergson, Henri, 474 ff.; on *élan vital*,

- 476 f.; on experience, 474 f.; on God, 477; on ideas, 474 f.; on intuition, 476; on Reality, 475; on reason, 475 f.
- Berkeley, George, 140 ff., 155; life of, 140 f.; on distance, 143; on epistemology, 151; on ethics, 150; on existence, 147; on experience, 147 f.; on God, 147 f.; on ideas, 145 f.; on knowledge, 151; on magnitude, 144; on matter, 145 f.; on mind, 145; on sensations, 146 f.; on situation, 144; on skepticism, 146 f.; on substances, 146; on universals, 145
- Bessarion, Cardinal, 4
- Bible, and China, 178 f.
- Biology, progress in, 381, 419
- Biran, Maine de, 378, 428
- Boccaccio, 3
- Boehme, Jacob, mysticism of, 35 f.; on evil, 36; on God, 35 f.
- Bolingbroke, Henry, 180
- Boutroux, Emile, 428 f.
- Bosanquet, Bernard, 426 f.
- Bowne, B. P., 459 f.
- Bradley, F. H., 423 f.; on idealism, 424 f.; on Reality, 425; on the Absolute, 426
- Brentano, Franz, 482
- British empiricists, and Kant, 218 f.
- British idealism, 423 f.
- British philosophers, 178, 391 ff.
- Brockmeyer, 453
- Brown, Thomas, 393
- Bruno, Giordano, 30 ff.; and astronomy, 31 f.; life of, 31; mysticism of, 33; on God, 31 f.; on mind, 32
- Büchner, L., 412
- Buffon, 197
- Butler, Joseph, 183
- Byzantine Empire, collapse of, 4
- Cabanis, 195 f.
- Caesalpinus, 29
- Caird, Edward, 426
- Calculus, Leibnitz's use of, 108 f.
- Calvin, 21
- Campanella, Tommaso, 33 f.
- Candide* (Voltaire), 180
- Cantor, 456
- Cardano, 30
- Carnot, Sadi, 381
- Carr, H. Weldon, 458 f.
- Castiglione, 7
- Categorical imperative, Kant on, 247 f.
- Categories, Hamilton on the, 394; Kant on the, 223, 233, 250 f.; Renouvier on, 428 f.
- Catholicism, see Church, Counter-Reformation
- Causation, Brown on, 393; Hegel on, 305, 306, 316 f.; Herbart on, 358 f.; Hume on, 159, 170; Kant on, 228 f., 238, 242, 252, 263 f.; Mill on, 400; Schelling on, 296; Schopenhauer on, 342
- Cause and effect, Hume on, 155, 158 ff.; Locke on, 129; see also Causation
- Cause, First, Kant on, 232
- Cellini, Benvenuto, 8
- Chambers, 382
- Chance, Hume on, 161 f.
- Chanut, 58
- China, and the Bible, 178 f.; Enlightenment influenced by, 178 f.
- Christ, Nietzsche on, 448
- Christianisme dévoilé* (Holbach), 194
- Christianity, and Aristotle, 29; and Hegelianism, 368; attacked by Holbach, 194; attacked by Priestley, 181; defended by Butler, 183; defended by Paley, 188; Hegel on, 327, 333; Marx on, 377; morality of, 247; Nietzsche on, 439, 447 f.; Schleiermacher on, 367; see also Belief, God, Religion
- Christina, Queen of Sweden, 57
- Chrysoloras, 3
- Church, corruption of, 20 f.; German discontent with, 20 f.; renewed activity of, 23 f.; see Christianity
- Clarke, 180, 182
- Classic art, Hegel on, 330
- Clifford, W. K., 416
- Co-existence, Kant on, 229 f.
- Coherence, Hume on, 167

- Coleridge, S. T., and German idealism, 391, 423
- Collins, Anthony, 180
- Columbus, Christopher, 5
- Communist Manifesto* (Marx and Engels), 370, 377
- Comte and Positivism* (Mill), 397
- Comte, Auguste, life of, 384; law of three stages of, 385; on development of sciences, 386 f.; on God, 390; on humanity, 390; on religion, 390; on science, 385 f.; on social dynamics, 389 f.; on social sciences, 388; on social statics, 389; on society, 389; positivism of, 382 ff.
- Concepts, Bradley on, 424; Kant on, 224; Vaihinger on, 478
- Condillac, 191 f.; and Maine de Biran, 378
- Condorcet, 198
- Conscience, Hegel on, 322 f.; Smith on, 184
- Consciousness, Alexander on, 496 f.; Fichte on, 279 f.; Hamilton on, 394; Herbart on, 360, 362 f.; Husserl on, 485 f.; James on, 463 f.; Kant on, 225 f.; Leibnitz, 109 f.; Locke on, 131; Mill on, 397 f.; Reinhold on, 269; Russell on, 489 f.; Schelling on, 295 f.; social, Hegel on, 308 f.; Spencer on, 408; Whitehead on, 492; see also Mind, Reason
- Constancy, Hume on, 165 f.
- Contemplation, Schopenhauer on, 348 f.
- Contentment, Kant on, 253
- Copernicus, 16 f.
- Cosmology, Kant on, 240
- Council of Trent, 23
- Counter-Reformation, 23 ff.
- The Courtier* (Castiglione), 7, 39
- Cousin, Victor, 378 f.; and German idealism, 379
- Critique of Judgment* (Kant), 254, 262
- Critique of Practical Reason* (Kant), 246, 248, 254
- Critique of Pure Reason* (Kant), 219, 246
- Croce, Benedetto, 479 f.
- Cudworth, Ralph, 40
- Cumberland, Richard, 182
- Cuvier, 381
- D'Alembert, 154, 194
- Dana, James D., 454
- Dante, 3
- Darwin, Charles, 382; and Nietzsche, 442; influence of, 404 f.; on evolution, 403 f.; on origin of man, 404 f.
- Das Kapital* (Marx), 378
- Daumer, 369 f.
- Davidson, Thomas, 458
- Death, Schopenhauer on, 351
- De Bonnet, 197
- De Corpore* (Hobbes), 47
- Deduction, Mill on, 399, 401
- De Homine*, 47
- Deists, French, 190 ff.
- De la Mettrie, 194
- De l'Esprit* (Helvétius), 192, 193
- De Maillet, 197
- Democracy, Rousseau on, 245
- De Motu* (Berkeley), 141
- Descartes, René, 1, 34, 55 ff.; cosmology of, 66; Leibnitz disagrees with, 107 f.; life of, 55 f.; on astronomy, 66 f.; on error, 61; on evil, 62; on God, 61 f.; on mind, 63, 67; on physics, 65 f.; on the will, 63 f.; philosophy of, 59 f., 63; scholastic influence on, 59
- Descent of Man* (Darwin), 404
- Despots, Italian, "culture-mad," 3 f.
- Dewey, John, 470 f.; on ideas, 470 f.; on instrumentalism, 470 f.; on knowledge, 472; on reality, 472; on religion, 472 f.; on truth, 470 f.
- Dialectic, Hegel on, 312 f.; Kant on, 222 f.
- Dialectical Materialism, Marx on, 372, 373 f.
- Dialogues* (Berkeley), 141, 146 f.
- Diderot, 154, 191, 193 f.
- Diet of Augsburg, 20
- Diet of Worms, 20 f.
- Discourse* (Rousseau), 201
- Discourse on Method* (Descartes), 1, 56, 60

- Dissertation on the Passions* (Hume), 173
 Distance, Berkeley on, 143
 Divine grace, 24
Doctrine of Religion (Fichte), 276, 290
 Draper, Henry, 454
 Durkheim, E., 420
 Duty, Fichte on, 286; Hegel on, 322; Kant on, 246 f.; see Ethics, Morality
- Earth, roundness of, confirmed, 5
 Ecclesiastical corruption, 19 f.
 Economics, Marx on, 374; study of, 382
 Eddy, Mary Baker, 554
 Edict of Nantes, 21
 Education, 1 f.; Fichte on, 277; Herbart on, 364; humanistic, 3 f.; Rousseau on, 203 f.
 Edwards, Jonathan, 451
 Ego, Fichte on the, 279 f.; Absolute, Fichte on the, 280, 282 ff.; Hegel on the, 307 f.; Herbart on the, 360, 363; transcendental, Kant on the, 225
 Einstein, Albert, 510
Elan vital, Bergson on, 476 f.
 Elizabeth, Princess of Bohemia, 57
 Emergent evolution, Alexander on, 495 f.
 Emerson, Ralph Waldo, 452 f.
Emile (Rousseau), 203
 Emotions, Kant on the, 252 f.; Spinoza on the, 90 ff., 96 f.
 Empiricism, Green on, 423; Kant on, 244; of Leonardo da Vinci, 13 f.
Encyclopaedia of Philosophic Sciences (Hegel), 302
 Engels, F., 370, 377
 England, Humanism in, 2; Italian influence on, 39 f.; Platonism in, 40; science in, 381; see also British
 Enlightenment, China's influence on, 178 f.; Hegel on, 328; in France, 190 ff.; in Germany, 208 ff.
Enquiry into Morals (Hume), 153
Enquiry into the Human Understanding (Hume), 153, 162
Ens realissimum, Kant on, 240 f.
 Entities, Bradley on, 424; Mach on, 413 f.
- Epicureanism, propagated by Gassendi, 37 f.
 Epistemology, of Berkeley, 151
 Erasmus, 30
 Error, Descartes on, 61; Locke on, 134; Spinoza on, 85, 89; see also Truth
Esprit de Lois (Montesquieu), 198
Esquisse d'un tableau historique du progrès de l'esprit humain (Condorcet), 198
Essay concerning Human Understanding (Locke), 122, 123
Essay concerning Toleration (Locke), 122
Essay on Liberty (Mill), 396
Essay on Women (Schopenhauer), 338
Essay Towards a Critique of all Revelations (Fichte), 273
Essay Toward a New Theory of Vision (Berkeley), 140, 143
Essays (Bacon), 41
Essays (Montaigne), 30
Essays, Moral and Political (Hume), 153
Essays on Religion (Mill), 397
 Essences, Hegel on, 314 f.; Locke on, 132 f.; Santayana on, 499 f.
 Esthetic, Kant's transcendental, 220 f.
 Esthetics, Fichte on, 288 f.; Kant on, 254 ff., 261; Schopenhauer on, 351 f.; see also Art, Beauty
Ethics (Spinoza), 72, 74 f., 90
 Ethics, Berkeley on, 150; Catholic, 24; Fichte on, 292; Hartley on, 185; Hegel on, 321; Helvétius on, 192; Herbart on, 363; Hobbes on, 50; Holbach on, 195; Hutcheson on, 184; Kant on, 246 f.; Mill on, 402; Nietzsche on, 447; Protestant view of, 21 f.; Schopenhauer on, 347 f.; Spencer on, 409 f.; Spinoza on, 92 f.; see also Morality
 Events, Whitehead on, 492 f.
Evidences of Christianity (Paley), 188
 Evil, Boehme on, 36; Descartes on, 63; Leibnitz on, 117 f.; Spinoza on, 92 f.; Protestant view of, 22 f.; Schelling on, 300; see also Ethics, Morality

- Evolution, Darwin on, 403 f.; emergent, Alexander on, 495, 497 f.; in America, 454 f.; in France, 196 f.; Locke on, 196; Nietzsche on, 446; progress of, 382, 420; Spencer on, 407, 410
- Existence, Berkeley on, 147; Fichte on, 279 f., 290 f.; Hartmann on, 437; Hume on, 157; Kant on, 219, 239; Locke on, 135 f.; Santayana on, 500; Schelling on, 299
- Experience, Bergson on, 474 f.; Berkeley on, 147 f.; Croce on, 479 f.; Hamilton on, 394; Hegel on, 307; Herbart on, 355 f.; Husserl on, 486; James on, 463 f., 465 f.; Kant on, 227 ff., 244, 258; Locke on, 123 f.; Lotze on, 445; Mill on, 397; Renouvier on, 429 f.; Royce on, 455; Schiller on, 469; Schopenhauer on, 341, 343
- Externality, Hume on, 163
- Faith, Fichte on, 289; Locke on, 138; see also Belief, Religion
- Fechner, G. T., 420, 433
- Feuerbach, 368
- Fichte, J. G., 273 ff.; and Hegel, 301, 303; and Kant's philosophy, 278 ff.; and Lotze, 436; and Schopenhauer, 341; criticism of, 275, 292; life of, 273 f.; on activity, 284; on *anstösse*, 281 f.; on art, 287 f.; on beauty, 287 f.; on belief, 289 f.; on consciousness, 279 f.; on duties of man, 286; on education, 277; on esthetics, 288; on ethics, 292; on existence, 279 f., 290 f.; on faith, 289; on freedom, 283 ff.; on Germany, 276 f.; on God, 283 f., 290 f.; on knowledge, 282, 291; on love, 292 f.; on marriage, 285; on mind, 287; on morality, 283 f., 286 f., 290 f.; on philosophy, 278, 286; on reality, 278; on reason, 281; on religion, 274; on salvation, 291 f.; on self-consciousness, 279; on sensation, 281 f.; on society, 284 f.; on solipsism, 288; on space, 281; on substance, 281; on the Absolute Ego, 280, 282 ff.; on the ego, 279 f.; on the non-ego, 279; on the State, 284 f.; on the universe, 281 f., 284; on the will, 282; on time, 281; on truth, 291; Schelling disagrees with, 294 f.; works of, 276
- Ficino, Marsilio, 26
- First Cause, Kant on, 232
- First Principles* (Spencer), 407
- Fiske, John, 455
- Florence, Platonic Academy in 3; Renaissance center, 3 f.
- Force and Matter* (Büchner), 412
- Force, Hegel on, 315; Leibnitz on, 107 f.
- Fouillée, Alfred, 432
- Foundation of Induction* (Lachelier), 431
- France, Enlightenment in, 190 ff.; evolution in, 196 f.; humanism in, 2; political radicalism in, 197 f.; science in, 380 f.
- Franklin, Benjamin, 154
- Frederick the Great, 208
- Freedom, Fichte on, 283 ff.; Hegel on, 302, 306, 315, 322 f.; Hume on, 162 f.; Kant on, 245, 248, 249 f., 254, 268; Mill on, 401; of the will, 38; Protestantism unfavorable to, 21
- French, deists, 190 ff.; idealism, 428 ff.; see also France
- Freud and psychoanalysis, 511
- Froebel and Herbart, 364
- "Fulguration," Leibnitz's, 114 1.
- Galileo, 17
- Gama, Vasco da, 5
- Gassendi, Pierre, 37 f.
- Gauss, 381
- Gegenstandstheorie*, Meinong on, 483
- Gentile, Giovanni, 481
- Gentleman, ideal of, 7
- Geology, progress in, 381
- German idealism, and Cousin, 379; and Kant, 269 f.
- Germany, enlightenment in, 208 ff.; Fichte on, 276 f.; Hegel on, 328 f.; humanism in, 2; materialism in,

- 411 f.; philosophy in, 433 ff.; science in, 381
- Gesner, 17
- Geulincx, 68
- Gilbert, 17
- Gioberti, 379 f.
- God, Alexander on, 495; Bergson on, 477; Berkeley on, 147 f.; Boehme on, 35 f.; Bowne on, 460; Bruno on, 31 f.; Campanella on, 34 f.; compared with universe by Spinoza, 76 f., 80; Comte on, 390; Descartes on, 61 f.; Feuerbach on, 368; Fichte on, 283 f., 290 f.; Hume on, 162 f., 172 f.; James on, 467; Kant on, 232, 238 f., 240, 242, 245, 248, 253 f., 267; Leibnitz on, 112 ff., 114 f.; Locke on, 136 f.; Mach on, 415; Malebranche on, 68 f.; Mansel on, 396; Mill on, 398 f.; occasionalists on, 68; Paracelsus on, 27; Priestley on, 181; Reid on, 185; Russell, 491; Santayana on, 506 f.; Schelling on, 298, 300; scientific view of, 418; Spencer on, 406; Spinoza on, 74 f., 77 f., 99 f.; Strauss on, 368; Vico on, 205 f.; see also Religion, Theology
- Godwin, William, 187 f.
- Goethe, 210, 211 f.; and Schopenhauer, 338
- Göschel, 367
- Government, Hume on, 176 f.
- Grammar of Science* (Pearson), 417
- Gray, Asa, 454
- Greek art, 211
- Greek civilization, Nietzsche on, 439 f., 443 f.
- Greek, revival of, 3
- Greek scholars in Florence, 4
- Green, T. H., 424 f.
- Günther, 367
- Guyau, Jean, 432
- Haeckel, E., 412
- Hamann, 212
- Hamilton, Sir William, 393 f.
- Happiness, Hegel on, 322; Kant on, 246, 252; Mill on, 402 f.; utilitarian, 392 f.; see also Pleasure
- Harris, W. T., 453
- Hartley, David, 180, 181, 185
- Hartmann, Eduard von, 436 f.
- Hegel, G. W. F., 301 ff., 367; and Fichte, 301, 303; and Kant, 303; and Marx, 370 f.; and Schelling, 301, 303; and Schopenhauer, 341 f.; cosmology of, 320 f.; life of, 301 f.; on Absolute Idea, 305, 318 f., 333; on Absolute Spirit, 306 f., 310 f., 332; on activity, 307; on actuality, 315; on ancient politics, 325 f.; on Appearance, 314 f.; on art, 310, 329 f.; on basic triads, 313 f., 320 f.; on beauty, 329; on becoming, 313, 318 f.; on being, 313; on causation, 305, 306, 316 f.; on Christianity, 327, 333; on classic art, 330 f.; on conscience, 322 f.; on dialectic, 312, 313; on duty, 322; on Enlightenment, 328; on essence, 314; on ethics, 321; on existence, 315; on experience, 307; on Force, 315; on freedom, 302, 306, 315, 322 f.; on Germany, 328 f.; on happiness, 322; on Hellenism, 326, 333 f.; on history, 324 ff.; on identity, 301 f., 314; on international law, 323; on Judaism, 333 f.; on logic, 312 ff.; on matter, 320; on measure, 314; on morality, 318, 321 f.; on nature, 305, 320 f.; on necessity, 315 f.; on objective spirit, 308 f.; on organism, 321; on oriental art, 330; on paganism, 332; on philosophy, 311, 334 ff.; on physics, 320 f.; on politics, 324; on process, 304, 318; on quality, 314 f.; on quantity, 314; on quantum, 314; on rational being, 309 f.; on Reality, 304, 310; on reciprocity, 317, 320; on religion, 311, 327 f., 332 f.; on romantic art, 331; on Romantic Movement, 301; on Rome, 324, 326; on self-consciousness, 309 f.; on self-realization, 318 f.; on sensation, 307; on social consciousness, 308 f.; on spirit, 305 f., 309 f., 321; on substance, 316; on symbolism, 330 f.; on syntheses, 312 f.; on the Absolute, 304, 318 f.; on the ego, 307 f.; on the

- non-ego, 307 f.; on the Orient, 325 f.; on the self, 308 f.; on the state, 323; on the sublime, 330; on the will, 322 f., 329; on world-process, 304 f., 312, 318; works, 302
- Hegelianism, 366; and Christianity, 368
- Hellenism, Hegel on, 326, 333; in Italy, 3 f.
- Helmholtz, 382
- Helvétius, 192 f.
- Henry VIII, 21, 40
- Herbart, J. H., 355 ff.; and Kant, 355; life of, 355; on causality, 358 f.; on consciousness, 360, 362 f.; on education, 364; on ethics, 363; on experience, 355 f.; on knowledge, 355 f., 360 f.; on matter, 358 f.; on mind, 357, 361; on motion, 357 f.; on pain, 362; on pleasure, 362; on psychology, 361 f.; on Reality, 356 f., 360 f.; on religion, 364; on sensation, 362; on space, 357, 359; on the ego, 360, 363; on the self, 360, 362 f.; on the soul, 357, 361; on thing-in-itself, 359 f., 361; on time, 356; on togetherness, 358 f.
- Herder, 211
- Herschel, 381
- Hertford, Lord, 154
- Herz, H., 416
- History, Comte on, 389; Croce on, 480; Hegel on, 324 ff.; Schelling on, 298; Spencer on, 408; Vico on, 207
- History of Materialism* (Lange), 413
- History of Philosophy* (Hegel), 302
- Hobbes, Thomas, 46 ff., 182; and Rousseau, 244; life of, 46 f.; on ethics, 50; on international law, 53; on knowledge, 47 f.; on politics, 51 f.; on religion, 49; on sovereignty, 52; on universe, 49; philosophy of, 47 ff.; writings of, 46
- Holbach, 194, 197
- Honor, in Renaissance, 9
- Howison, George, 457
- Humanism, and Renaissance, 1; ideal of, 2 ff.; in England, 2; in France, 2; in Germany, 2; in Italy, 2 f.; in Spain, 3; see also Renaissance
- Humanistic education, 2 f.
- Humboldt, 381
- Hume, David, 152 ff., 185 f., 244; life of, 152 f.; on association, 160 f.; on belief, 157, 166; on causation, 159, 170; on cause and effect, 155, 158 ff.; on chance, 161 f.; on coherence, 167; on constancy, 165 f.; on existence, 157 f.; on externality, 163; on God, 162 f., 172 f.; on government, 176 f.; on ideas, 155 f.; on identity, 168 f.; on imagination, 164, 166 f.; on immaterialism, 169 f.; on immortality, 172 f.; on impressions, 155, 163 f.; on infinity, 156; on international law, 177; on liberty, 162 f.; on memory, 168; on metaphysics, 168 f.; on morals, 174 f.; on organisms, 167 f.; on perception, 170 f.; on probability, 160 f.; on reason, 164; on religion, 171 f.; on skepticism, 168 f.; on space, 156 f.; on Spinoza, 169 f.; on the passions, 173 ff.; on the self, 163 f.; on the will, 162 f.; on theism, 169, 172 f.; on time, 156 f.
- Humphrey, Duke of Gloucester, 2, 39
- Husserl, Edmund, 482, 485 f.; on consciousness, 485 f.; on experience, 486; on objects, 486 f.; on phenomenology, 485
- Hutcheson, Francis, 183 f.
- Huyghens, 105
- Hypnosis, 454
- Hypocrisy, Renaissance without, 9 f.
- Hypothesis, Kant on, 244
- Idea, absolute, Hegel on, 305, 318 f., 333
- Ideals, Kant on, 233 ff., 238; transcendental, Kant on, 238 f.; Santayana on, 507
- Idealism, Absolute, 273 ff.; American, 551 ff.; Bradley on, 424 f.; British, 423 f.; French, 428 ff.; German, and Cousin, 379; German, and Kant, 269; Marx on, 372; monistic, 457; pluralistic, 457; see Ideals, Ideas

- Ideas, abstract, Schopenhauer on, 342; Bergson on, 474 f.; Berkeley on, 145 f.; Dewey on, 470 f.; Hartmann on, 437; Hume on, 155 f.; Kant on, 220, 238; Platonic, Schopenhauer on, 348 f.; Spinoza on, 79
- Ideas Regarding a Philosophy of Nature* (Schelling), 294
- Identity, Hegel on, 301 f., 314; Hume on, 168 f.; Locke on, 130 f.
- Il Principe* (Machiavelli), 10
- Illusion, Kant on, 233 f.
- Imagination, Hume on, 164, 166; Spinoza on, 86
- Immaterialism, Hume on, 169 f.
- Immortality, Hume on, 172 f.; James on, 468; Kant on, 254, 267 f.; Leibnitz on, 115 f.; Locke on, 136 f.; Spinoza on, 100 f.; see also God, Religion
- Impressions, Hume on, 155, 163 f.
- Individual, Marx on, 374
- Induction, Bacon's method of, 43; Mill on, 399, 401; see also Logic
- Infinity, Hume on, 156; Locke on, 126; see also Universe
- Inquiry Concerning Political Justice* (Godwin), 187
- Inquisition, Bruno burned by, 31; in Spain, 23
- Instrumentalism, Dewey on, 470 f.
- Intellect, Schopenhauer on, 346 f.; see also Mind
- International law, Hobbes on, 53; Hume on, 177
- Intuition, Bergson on, 476; Croce on, 479; Kant on, 221, 231; Spinoza on, 88
- Italian despots, "culture-mad," 2 f.
- Italy, England influenced by, 39 f.; humanism in, 2 f.
- Jacobi, 212, 272 f., 275, 381
- James, William, 462 f.; on consciousness, 463 f.; on experience, 463 f., 465 f.; on God, 467; on immortality, 468; on knowledge, 464 f.; on religion, 466 f.; on truth, 464 f.; on universe, 467; on will to believe, 467 f.
- Jansen, Cornelius, 25
- Jansenism, 25, 69
- Jefferson, Thomas, 451
- Jerusalem* (Mendelssohn), 209
- Jesuits, doctrines of, 23 f.
- Joseph II, 208
- Jouffroy, 378
- Judaism, Hegel on, 333; Mendelssohn, 209
- Judgment, Kant on, 226, 258 f., 264; Meinong on, 483
- Kabbala, 26, 30, 71
- Kant, Immanuel, 215 ff.; and British empiricists, 218 f.; and British idealists, 423 f.; and Fichte, 278 ff.; and French Idealism, 428 f.; and German idealists, 269; and Hamilton, 393 f.; and Hegel, 303 f.; and Herbart, 355; and Wolff, 217; dominates modern philosophy, 217; early interest in science, 217 f.; life of, 215 f.; on antinomies, 235 f., 252 f., 261 f., 264 f.; on apperception, 224; on art, 259 f.; on beauty, 254 f., 261 f.; on categorical imperative, 247 f.; on categories, 223, 233, 250 f.; on causality, 229 f.; on causation, 228 f., 238, 242, 252, 263 f.; on concepts, 224; on co-existence, 229 f.; on consciousness, 225 f.; on contentment, 253; on cosmology, 240; on dialectic, 222 f.; on duty, 246 f.; on empiricism, 244; on *ens realissimum*, 240 f.; on esthetics, 254 ff., 261; on ethics, 246 f.; on existence, 219, 239; on experience, 227 ff., 244, 258; on First Cause, 232; on freedom, 245, 248, 249 f., 254, 268; on God, 232, 238 f., 240, 242, 245, 248, 253 f., 267; on happiness, 246, 252; on hypothesis, 244; on ideals, 233, 238 ff.; on ideas, 220, 238; on illusions, 233 f.; on immortality, 254, 267 f.; on intuition, 221, 231; on judgment, 226, 258 f., 264; on knowledge, 221, 230; on man, 266; on morality, 245 f., 247 f., 250 f.,

- 267 f.; on music, 260 f.; on noumena, 230 f.; on ontological argument, 239; on paralogsms, 233 ff.; on phenomena, 231, 263 f.; on philosophy, 243 f.; on pleasure, 261 f.; on poetry, 260; on practical reason, 247 f., 251; on pure reason, 219, 232 f., 238 f., 242 f.; on purpose, 262 f.; on representation, 263; on right behavior, 247 f., 252; on science, 230; on space, 220 f.; on synthesis, 223 f.; on taste, 254 f.; on teleology, 261 ff.; on the emotions, 252; on the mind, 218, 224, 242; on the *schemata*, 225 f., 241, 251; on the self, 219; on the soul, 232, 234 f.; on the sublime, 257 f.; on the universe, 232, 238; on the will, 249, 255; on theology, 268 f.; on things-in-themselves, 241, 249; on time, 220 f., 228; on transcendental ideal, 238; on transcendental objects, 241 f., 251; on ugliness, 260; on virtue, 252 f.; poor style of, 216; transcendental analytic of, 221, 222 f.; transcendental dialectic, 221, 232 f.; transcendental ego, 225; transcendental esthetic of, 220 f.; transcendental logic of, 221 ff.; transcendentalism of, 220 ff.
- Kantian idealism, and Coleridge, 391
- Kantian metaphysics, and J. Mill, 392 f.
- Kepler, 17
- Kirchhoff, 416
- Knowledge, Berkeley on, 151; Dewey on, 472; Fichte, on, 282 f., 291; Hamilton on, 395; Herbart on, 355 f., 360 f.; Hobbes on, 47 f.; James on, 464 f.; Kant on, 221, 230; Locke on, 132 f.; Reinhold on, 270; Schopenhauer on, 341 f., 343; Spinoza on, 82, 84 f., 94, 98
- Inox, John, 21
- Lachelier, Jules, 429, 430 f.
- Laissez-faire, Mill on, 403
- Lamarck, 382
- Lange, J. J., 412
- Laokoon* (Lessing), 210, 211
- Lavater, 209
- Law of three stages, Comte's, 385
- Law of the Conditioned, 395
- Law of redintegration, 395
- Law, international, Hobbes on, 53; Hume on, 177
- Law, natural, Mill on, 399 f.
- Laws, scientific, Comte on, 384 f.
- Le Contrat Social* (Rousseau), 202
- Lectures on the Method of Academical Study* (Schelling), 299
- L'Homme Machine* (De la Mettrie), 194
- Leibnitz, G. W., 105 ff., 179, 500; disagrees with Descartes, 107 f.; disagrees with Spinoza, 107 f.; life of, 105 f.; on consciousness, 109 f.; on evil, 117 f.; on force, 107 f.; on freedom of will, 118; on "fulguration," 114 f.; on God, 112 ff., 114 f.; on immortality, 115 f.; on monads, 108 ff., 113; on physical world, 111; on reality, 111; on universe, 116; use of calculus by, 108 f.; wide interests of, 124; Wolff influenced by, 214
- Lenin, 378
- Leo X, Pope, 5, 23, 28
- Leonardo da Vinci, 10 f., 381; achievements of, 11 f.; defects of, 16 f.; empiricism of, 13 f.; paintings of, 11; religion of, 15; Renaissance incarnate in, 11 ff.; scientific interests of, 11 f.; solitude of, 15
- Laplace, 380
- Lessing, 209 f.
- Le système de la Nature* (Holbach), 194
- Letter Concerning Tolerance* (Locke), 122
- Lettres Provinciales* (Pascal), 69
- Lettres sur les causes premières* (Cabanis), 196
- Leviathan* (Hobbes), 46, 54
- Liberty, Hume on, 162
- Liebig, 381
- Life of Jesus* (Strauss), 367
- Life, Schopenhauer on, 351 f.
- Light, theory of, 418 f.
- Limits of Evolution* (Howison), 458

- Linnaeus, 266
 Literature, in Renaissance period, 5 f.
 Locke, John, 120 ff., 143; Condillac influenced by, 191 f.; Continental thinkers influenced by, 190; Diderot influenced by, 193; Helvétius influenced by, 192 f.; life of, 121 f.; on analogy, 137 f.; on cause and effect, 129; on consciousness, 131; on demonstration, 137; on error, 134; on essences, 132 f.; on evolution, 196; on existence, 135 f.; on experience, 123 f.; on faith, 138; on God, 136 f.; on identity, 130 f.; on immortality, 136 f.; on infinity, 126; on innate ideas, 123 f.; on knowledge, 132 f.; on mind, 123 f.; on morality, 124; on perception, 125; on politics, 122 f.; on power, 126; on probability, 137 f.; on reason, 138 f.; on religion, 122 f.; on substance, 128 f.; on the senses, 125 f.; on universals, 134 f.; on the will, 127 f.; on truth, 134; on words, 132; works of, 122
 Logic, Hegel on, 312 f.; Kant's transcendental, 221 ff.; Mill on, 399 f.; Russell on, 487 f.
Logic (Hegel), 302, 312
Logic (Mills), 397
 Lorenzo the Magnificent, 4
 Lotze, 382, 433 f.; and Fichte, 436; on experience, 435; on mechanism, 433 f.; on reality, 433
 Love, Fichte on, 292 f.; Spinoza on, 98 f.
 Loyola, 3
 Luther, Martin, 20 f.
 Mach, E., 412 f.; on entities, 413 f.; on God, 415; on mind, 414; on phenomena, 414; on science, 415 f.
 Machiavelli, 9, 39
 Magellan, 5 f.
 Magic, of Paracelsus, 28
 Magnitude, Berkeley on, 144
 Maimon, Salomon, 271 f.
 Malebranche, 179; on God, 68; on mind, 69
 Man, Kant on, 266; ideal of natural, 7; origin of, Darwin on, 404 f.
 Mandeville, John, 183
 Mansel, Henry, 396
 Marco Polo, 178
 Maria Theresa, 208
 Marriage, Fichte on, 285
 Marx, Karl, 370 f.; and Hegel, 370 f.; life, 370; on Christianity, 377; on dialectical materialism, 372, 373 f.; on economics, 374 f.; on idealism, 372; on individual, 374; on positivism, 372; on private property, 374, 375; on religion, 377; on science, 373; on society, 374, 376; on world-process, 372; on world revolution, 376
 Materialism, of Bacon, 44; Cabanis on, 195; dialectical, Marx on, 372, 373 f.; French, 194
 Mathematics, Kant on, 243 f.; progress in, 380, 418 f., 455
 Matter, Alexander on, 496; Berkeley on, 145 f.; Hegel on, 320; Herbart on, 358 f.; Santayana on, 501 f.
 Maupertius, 197
 Maxwell, James Clerk, 416
 McTaggart, J. M. E., 479
 Measure, Hegel on, 314
 Mechanism, Lotze on, 433 f.
 Medici, Cosimo, 3
 Medici, Lorenzo, 4
Meditations (Descartes), 56
 Meinong, Alexius, 482 f.
 Melanchthon, 21
 Memory, Hume on, 168
 Mendel, G., 419
 Mendelssohn, Moses, 209, 210
 Mersenne, 55
 Metaphysics, and Mill, 397; Hume on, 168 f.; Kantian, and J. Mills, 392 f post-Kantian, 269 f.; Royce on, 455 see also Idealism, Philosophy
Metaphysics (Weisse), 367
Metaphysics of Morals (Kant), 24, 248, 251
 Michelangelo, 8
 Mill, James, 392

- Mill, John Stuart, 382, 392, 396 f.; and metaphysics, 397; and positivism, 399; on altruism, 402; on causation, 400; on consciousness, 397 f.; on deduction, 399, 401; on ethics, 402; on experience, 397; on freedom, 401 f.; on God, 398 f.; on happiness, 402 f.; on induction, 399, 401; on laissez-faire, 403; on logic, 399 f.; on natural laws, 399 f.; on the self, 397; works, 396 f.
- Mind, Alexander on, 495 f.; and psychoanalysis, 511; Berkeley on, 145; Bruno on, 32; Condillac on, 191; Descartes on, 63; Fichte on, 287; Godwin on, 187; Hamilton on, 395; Herbart on, 357, 361; Kant on, 218, 224, 242; Locke on, 123 f.; Mach on, 414; Malebranche on, 68; Russell on, 489 f.; Santayana on, 501 f.; Spinoza on, 80, 84, 87 f., 101; Whitehead on, 492; see also Consciousness, Reason
- Moleschott, J., 412
- Molina, Louis de, 24
- Molinism, 24
- Molyneux, 143
- Monads, Bruno's use of, 32; Carr on, 458 f.; Leibnitz on, 108 ff.
- Montaigne, 30; Pascal influenced by, 70
- Montesquieu, 198 f.
- Moore, G. E., 494 f.
- Moralists, of Renaissance, 8 f.
- Morality, Bowne on, 461; Cumberland on, 182; Fichte on, 283 f., 286 f., 290 f.; Hegel on, 318, 321 f.; Hume on, 174 f.; Kant on, 245 f., 247 f., 250 f., 267 f.; Locke on, 124; of Christianity, 247; of Renaissance, 8 f.; Royce on, 456; Schelling on, 298; Schopenhauer on, 351 f.; Shaftesbury on, 182; Smith on, 184; Spencer on, 409 f.; see also Ethics, Religion
- More, Henry, 40
- More, Thomas, 2, 39 f.
- Motion, Herbart on, 357 f.; see also Physics
- Music, Kant on, 260 f.; Schoepphauer on, 350
- Mydorge, 55
- Mysticism, of Boehme, 35 f.; of Bruno, 33; see also God, Religion
- Nantes, Edict of, 21
- Napolconic Wars, 276
- Nathan der Weise* (Lessing), 210
- Natural History of Religion* (Hume), 153, 172
- Natural laws, Mill on, 399 f.
- Naturalism, 29; in America, 454 f.; in Germany, 411 f.
- Natura naturata*, of Spinoza, 79
- Nature, Hegel on, 305, 320 f.; Rousseau on, 201; Schopenhauer on, 345
- Nature of the Scholar* (Fichte), 276
- Neo-Hegelianism in America, 453 f.
- Neo-Platonists, 26 f.
- Neo-realism, 482 ff.
- Neo-Scholasticism, 498 f.
- New Atlantis* (Bacon), 41
- New Essays* (Leibnitz), 106, 118
- "New Thought" movement in America, 453 f.
- Newton, calculus of, 106
- Nicholas V, Pope, 4
- Nietzsche, Friedrich, 436, 438 f.; and Darwin, 442; and Schopenhauer, 441; influence of, 449 f.; life, 438 f.; on art, 444 f.; on Christ, 448; on Christianity, 439, 447 f.; on ethics, 447; on evolution, 446; on Greek civilization, 439 f., 443 f.; on modern world, 439, 445 f.; on pessimism, 441; on superman, 446 f.; on Will for Power, 440 f.
- Nirvana, Schopenhauer on, 352
- Non-ego, Fichte on the, 279; Hegel on the, 307 f.; Schelling on the, 295 f.
- Noumena, Kant on, 230 f.
- Novum Organum* (Bacon), 41
- Objectification, Schopenhauer on, 344 f., 346, 350
- Objective spirit, Hegel on, 308 f.
- Objects, Husserl on, 486 f.; Meinong

- on, 484 f.; transcendental, Kant on, 241 f.
- Observations on Man* (Hartley), 185
- Occasionalists, 68 ff.
- Occasions, Whitehead on, 491
- On the Amendment of the Understanding* (Spinoza), 72, 74
- On the Characteristics of the Present Age* (Fichte), 276
- On the Difference between the Systems of Fichte and Schelling* (Hegel), 302
- On the Relations of the Fine Arts to Nature* (Schelling), 294
- On the Ultimate Origin of Things* (Leibnitz), 118
- On Vision and Color* (Schopenhauer), 339
- On the Will in Nature* (Schopenhauer), 340
- On the World-Soul* (Schelling), 294
- Ontological argument, Kant on, 239
- Organisms, Hegel on, 321; Hume on, 167 f.
- Organum* (Bacon), 41
- Orient, Hegel on the, 325
- Oriental art, Hegel on, 330
- Origin of Species* (Darwin), 382
- Orthodoxy, in America, 451 f.
- Ostwald, W., 412
- Outline of Cosmic Philosophy* (Fiske), 455
- Over-Soul, Emerson on, 453
- Paganism, Hegel on, 332
- Pain, Herbart on, 362
- Paine, Thomas, 187
- Paley, William, 188 f.
- Pantheism, 29, 181
- Paracelsus, magic of, 28; on God, 27
- Paralogisms, Kant on, 233 f.
- Pascal, Blaise, 69
- Passions, Hume on the, 173 ff.; Spinoza on the, 89, 97
- Pearson, Karl, 416
- Peirce, Charles, 462
- Pensées* (Descartes), 56
- Pensées* (Pascal), 69
- Perception, Hume on, 179 f.; Locke on, 125; Schelling on, 296 f.; see also Mind, Sensation
- Perfectibility, Condorcet on, 199
- Personalism, 459 f.
- Perspectives, spacial and temporal, 1
- Pessimism, Nietzsche on, 441; Schopenhauer on, 346
- Pestalozzi, 364
- Petrarch, 3, 39
- Phädon* (Mendelssohn), 209
- Phenomena, Hamilton on, 394; Kant on, 231, 263 f.; Mach on, 414 f.; Schopenhauer on, 343, 346; Spencer on, 406 f.
- Phenomenology, Husserl on, 485
- Phenomenology of Spirit* (Hegel), 302, 312
- Philosophy, American, 451 ff.; and science, 406 ff.; and the new astronomy, 16 f.; British, 178 f.; contemporary, 462 ff.; Continental, 26 ff.; dominated by Kant, 217; essentials of, 49 f.; Fichte on, 278, 286; Hegel on, 311, 334 f.; in modern Germany, 433 ff.; Kant on, 243 f.; of Bacon, 42 f.; of Descartes, 59 f., 63 f.; of Hobbes, 47 ff.; Santayana on, 508 f.; Spencer on, 406 f.; Vico on, 207
- Philosophy of History* (Hegel), 302, 325
- Philosophy of Religion* (Hegel), 302
- Philosophy of Right* (Hegel), 302
- Physical world, Leibnitz on, 111
- Physics, Descartes on, 65 f.; Hegel on, 320 f.; progress of, 510 f.; Spinoza on, 83
- Pico della Mirandola, 26
- Platonic Academy, in Florence, 3
- Platonic Ideas, Schopenhauer on, 348, 353
- Platonism, in England, 40, 182
- Pleasure, Herbart on, 362; Kant on, 261 f.; Spinoza on, 89, 91, 95; see also Happiness
- Pletho, Gemisthus, 3
- Pluralism, revival of, 459 f.
- Poetry, Bacon on, 45; Kant on, 260; Schopenhauer on, 350; see also Beauty, Esthetics

- Poincaré, Henri, 416
Political Discourses (Hume), 153
 Political radicalism, in France, 198
 Politics, Hegel on, 324; Hobbes on, 51;
 Locke on, 122 f.
Politics (Aristotle), 10
 Pomponazzi, 28
 Port Royal, School of, 69
 Porta, 17
Positive Philosophy (Comte), 384
 Positivism, and Mill, 399; Marx on,
 372; of Comte, 382 ff.
Positivist Calendar (Comte), 382
 Power, Locke on, 126; Nietzsche on,
 440 f.
 Practical reason, Kant on, 247 f., 251 f.
 Pragmatism, 462 ff.; James on, 462 f.
 Price, Richard, 185, 187
 Priestley, Joseph, 180, 181, 186 f.
Principles (Descartes), 57
Principles of Biology (Spencer), 407
Principles of Ethics (Spencer), 408
Principles of Political Economy (Mill),
 396, 403
Principles of Psychology (Spencer),
 408
Principles of Sociology (Spencer), 408
 Pringle-Pattison, Seth, 479
 Private property, Marx on, 374, 375
 Probability, Hume on, 160 f.; Locke
 on, 137 f.
 Process, Hegel on, 304, 318
 Progress, Rousseau on, 201
Prolegomena to Ethics (Green), 423
 Protestant Reformation, 19 ff.
 Protestantism, and ethics, 19 f.; and
 freedom, 21 f.; and Renaissance,
 22 f.; defects of, 21 f.; see also God,
 Religion, Theology
 Psychoanalysis, and Freud, 511; and
 mind, 511
Psychology and Metaphysics (Lache-
 lier), 431
 Psychology, associational, 391; Hel-
 vétius on, 192; Herbart on, 361,
 382 f.; Mill on, 397; progress of,
 382, 420; Spinoza on, 83
 Psycho-physics, Spinoza on, 83
 Pure reason, Kant on, 219, 232 f.,
 238 f., 242 f.
 Purpose, Kant on, 262 f.
 Quality, Hegel on, 314
 Quantity, Hegel on, 314
 Quantum theory, 510
 Quesnay, 180
 Quimby, 454
 Radicalism, political, in France, 198
 Ramus, 37
 Rational being, Hegel on, 309 f.
 Ravaisson-Mollien, Felix, 428 f.
 Reality, Alexander on, 495; Bosanquet
 on, 426 f.; Bowne on, 460; Bradley
 on, 425 f.; Croce on, 479; Dewey on,
 472; Fichte on, 278; Hamilton on,
 395; Hartmann on, 438 f.; Hegel on,
 304, 310; Herbart on, 356 f., 360 f.;
 Hobbes on, 48; Lachelier on, 429;
 Lange on, 412; Leibnitz on, 111;
 Lotze on, 433; Renouvier on, 427 f.;
 Russell on, 488 f.; Schelling on, 297,
 299; Schulze on, 270; Spencer on,
 406 f.; Spinoza on, 80 f., 98 f.;
 Whitehead on, 493 f.
 Reason, Bergson on, 475 f.; Fichte on,
 281; Hume on, 164; Kant on, 219,
 232 f., 238 f., 242 f., 247 f., 251;
 Locke on, 138 f.; Santayana on, 501,
 508; Schopenhauer on, 342, 344;
 Spinoza on, 95; see also Mind
Reasonableness of Christianity (Locke),
 137
 Reciprocity, Hegel on, 317, 320
 Redemption, Hartmann on, 438;
 Spinoza on, 103 f.
 Reformation, and freedom of thought,
 21; defects of, 21 f.; nature of, 19 ff.;
 see also Humanism, Renaissance
 Reid, Thomas, 185
 Reimarns, 209
 Reinhold, 269, 275
 Relativity, theory of, 419
 Religion, Comte on, 390; Dewey on,
 472; Fichte on, 274; Hegel on, 311,
 327 f., 332 f.; Herbart on, 364;
 Hobbes on, 49; Hume on, 171 f.;

- James on, 466 f.; Leonardo da Vinci on, 15; Lessing on, 210; Locke on, 122 f.; Marx on, 377; Rousseau on, 203; Spencer on, 410; Wolff on, 213; see also God, Theology
- Renaissance, and humanism, 1; and Reformation, 22; gentleman of, 6 f.; honor in, 9; in Florence, 3; lack of hypocrisy in, 9; Leonardo da Vinci incarnation of, 11 ff.; literature of, 5 f.; moralists of, 9 f.; morals of, 8 f.; scholarship of, 3 f., 26 f.; spirit of, 1 ff.; see also Humanism, Renaissance
- Renouvier, Charles, 429 f.
- Representation, Kant on, 263
- Republic* (Plato), 35
- Reuchlin, 30
- Reymond, E. D., 416
- Reymond, P., 416
- Riddle of the Universe* (Haeckel), 412
- Right behavior, Kant on, 247 f., 252
- Robinet, 197 f.
- Romantic art, Hegel on, 331
- Rome, Hegel on, 324, 326; sack of, 23
- Rosmini, 379 f.
- Rothe, 369
- Rousseau, J. J., 180, 364; and Frederick the Great, 208; and Hobbes, 202; character of, 199; life, 200; on democracy, 202 f.; on education, 203 f.; on government, 203; on nature, 201 f.; on progress, 201; on religion, 203; on society, 201 f.; Priestley a disciple of, 186
- Royce, Josiah, 455 f.
- Royer-Collard, 378
- Russell, Bertrand, 487 f.; on consciousness, 489 f.; on God, 491; on logic, 487 f.; on mind, 489 f.; on Reality, 488 f.
- Saint-Simon, 384
- Salutate, 3
- Salvation, Fichte on, 291 f.; Schopenhauer on, 351 f., 353 f.; see also God, Religion, Theology
- Santayana, George, 499 f.; on essences, 499; on existence, 500 f.; on God, 506 f.; on ideals, 507; on matter, 501 f.; on mind, 501 f.; on philosophy, 508 f.; on reason, 501, 508 f.; on *psyche*, 503; on spirit, 503, 506; on the will, 504; on truth, 504 f.; on value, 506 f.; on universe, 500
- Savonarola, 10
- Schelling, Friedrich von, 294 ff.; and Hegel, 294; disagrees with Fichte, 276, 294 f.; life of, 294 f.; on art, 297; on causation, 296; on consciousness, 295 f.; on evil, 300; on existence, 299; on God, 298, 300 f.; on history, 298; on morality, 298; on perception, 296 f.; on Reality, 297, 299 f.; on self-determination, 297; on sensation, 296; on the Absolute, 299 f.; on the non-ego, 295 f.; on the will, 297 f.
- Schemata*, Kant on the, 225 f., 241, 251
- Schiller, F. C. S., 468 f.
- Schlegel, F., 275
- Schleiermacher, 275, 367
- Scholarship, of Renaissance, 3 f., 26 f.
- Scholastic influence on Descartes, 59
- Schopenhauer, Arthur, 337 ff.; and Fichte, 341; and Goethe, 338; and Hegel, 341; and Nietzsche, 441; influence of, 340; life of, 337 ff.; on abstract ideas, 342; on art, 348 f.; on causation, 342; on contemplation, 348 f.; on death, 351; on esthetics, 348 f.; on ethics, 347 f.; on experience, 341, 343; on Idea, 348 f.; on intelligence, 351 f.; on intellect, 346 f.; on knowledge, 341 f., 343; on life, 351 f.; on morality, 351 f.; on music, 350; on nature, 345; on Nirvana, 352; on objectification, 344 f., 346, 350; on pessimism, 346; on phenomena, 343, 346; on Platonic Ideas, 348, 353; on poetry, 350; on Reality, 343 f.; on reason, 342, 344; on salvation, 347 f., 351 f., 353; on self-renunciation, 351, 353; on sexual instinct, 353; on sin, 352; on the

- Absolute, 341, 345 f.; on the sublime, 349; on the will, 343 ff., 353; on truth, 348; on understanding, 342 f.; on world-process, 345 f.; works, 339 f.
- Schulze, 270, 338
- Science, and philosophy, 406 ff.; Comte on, 385 f.; concepts of, 417 f.; development of, Comte on, 386 f.; in England, 381; in France, 380 f.; in Germany, 381; Kant's interest in, 217 f., 230; Mach on, 415 f.; Marx on, 373; new concepts in, 416 ff.; progress of, 17; Spencer on, 406 f.
- Science of Right* (Hegel), 302
- Scientific laws, Comte on, 385 f.
- Secret of Hegel* (Stirling), 423
- Sedgwick, Henry, 423
- Self, Hegel on the, 308; Herbart on the, 360, 362 f.; Hume on the, 163 f.; Kant on the, 219; Mill on the, 397
- Self-consciousness, Fichte on, 279; Hegel on, 309; Lotze on, 436
- Self-determination, Schelling on, 297
- Self-realization, Hegel on, 318
- Self-renunciation, Schopenhauer on, 351, 353
- Sensation, Berkeley on, 146; Fichte on, 281 f.; Hegel on, 307; Herbart on, 362; Hobbes on, 50; Schelling on, 296
- Senses, Locke on the, 125 f.
- Sexual instinct, Schopenhauer on, 353
- Shaftesbury, Earl of, 121, 182 f.
- Shakespeare, 39
- Sidney, Sir Philip, 39 f.
- Sin, Schopenhauer on, 352
- Siris* (Berkeley), 142
- Situation, Berkeley on, 144
- Skepticism, of Berkeley, 146 f.; of Condillac, 192; of Hume, 168 f.
- Smith, Adam, 184
- Social consciousness, Hegel on, 308 f.
- Social dynamics, Comte on, 389 f.
- Social statics, Comte on, 389
- Society, Comte on, 389 f.; Durkheim on, 420 f.; Fichte on, 284 f.; Marx on, 374, 376; Rousseau on, 243 f.; Spencer on, 408 f.
- Sociology, progress of, 420 f.; Spencer on, 408
- Solipsism, Fichte on, 288
- Soul, Herbart on the, 357, 361 f.; Kant on the, 232, 234 f.; Pomponazzi on the, 28; see also Immortality
- Sovereignty, Hobbes on, 52
- Space, Fichte on, 281; Herbart on, 357, 359; Hume on, 156 f.; Kant on, 220 f.
- Spain, humanism in, 3; inquisition in, 23
- Spencer, Herbert, 406 ff.; on dissolution, 407; on ethics, 409 f.; on evolution, 407, 410; on God, 406; on history, 408; on morality, 409 f.; on phenomena, 406 f.; on philosophy, 406 f.; on Reality, 406; on religion, 410; on science, 406 f.; on society, 408 f.; on sociology, 408; on the state, 408
- Spenser, Edmund, 39
- Spinoza, Benedict, 32, 71 ff., 181; character of, 72 f.; compared God with universe, 76 f., 80; criticized by Toland, 180; Hume on, 169 f.; independence of thought of, 73 f.; Leibnitz disagrees with, 107 f.; life of, 72 f.; on error, 85 f., 89; on eternal good, 74; on ethics, 92 f.; on evil, 92 f.; on freedom of thought, 73; on God, 74 f., 77 f., 99 f.; on human good, 92 f., 95; on ideas, 79; on imagination, 86; on immortality, 100 f.; on infinite attributes, 75, 78; on intuition, 88 f.; on knowledge, 82, 84 f., 94, 98; on love, 98 f.; on mind, 80 f., 84, 87 f., 101; on morality, 94, 102; on physics, 83; on pleasure, 89, 91, 95; on psychology, 83; on psychophysics, 83; on Reality, 80 f., 98 f.; on reason, 95; on redemption, 103; on salvation, 102 f.; on self-consciousness, 80 f.; on substance, 78; on the emo-

- tions, 90 ff., 96 f.; on the passions, 89, 97; on the will, 85; on theology, 77; on truth, 83 f., 86; on universe, 74, 77; philosophical system of, 73 f.; works of, 72
- Spirit, Absolute, Hegel on, 305 f., 309 f., 321; Croce on, 479 f.; Hegel on, 305 f., 309 f., 321
- State, Fichte on the, 284 f.; Hegel on the, 323; Spencer on the, 408
- Statement of My System* (Schelling), 398
- Stewart, Dugald, 185
- Strauss, D. F., 367 f.
- Sturmer, 369
- Sublime, Hegel on the, 330; Kant on the, 257 f.; Schopenhauer on the, 349; see also Art, Beauty, Esthetics
- Substance, Alexander on, 495; Berkeley on, 146; Fichte on, 281; Hegel on, 316; Locke on, 128 f.
- Superman, Nietzsche on, 446 f.
- Symbolism, Hegel on, 330
- System of Positive Polity* (Comte), 384
- System of Transcendental Idealism* (Schelling), 294, 296
- Taste, Kant on, 254 f.
- Teleology, Kant on, 261 ff.
- Telesio, 29
- The City of the Sun* (Campanella), 34
- The Courtier* (Castiglione), 7, 39
- The Fable of the Bees* (Mandeville), 183
- The Fourfold Root of the Principle of Sufficient Reason* (Schopenhauer), 339
- The Origin of Species* (Darwin), 403
- The Subjection of Women* (Mill), 397, 403
- The Two Fundamental Problems of Ethics* (Schopenhauer), 340
- The Vocation of Man* (Fichte), 276, 288
- The World and the Individual* (Royce), 455
- The World as Will and Idea* (Schopenhauer), 339, 343, 347
- Theism, Hume on, 169, 172 f.
- Theodicy* (Leibnitz), 106
- Theologico-Political Tractate* (Spinoza), 72, 73
- Theology, American, 451 f.; Kant on, 268 f.; see also God, Religion
- Theory of Moral Sentiments* (Smith), 184
- Theory of Science* (Fichte), 275, 278
- Things-in-themselves, Herbart on, 359 f., 361; Kant on, 241, 249; Mill on, 397; Reinhold on, 269; Schultze on, 270
- Thomism, 499
- Thomson, Wm., 381, 418
- Thoughts on Parliamentary Reform* (Mill), 397
- Time, Fichte on, 281; Herbart on, 356; Hume on, 156 f.; Kant on, 220 f., 228; see also Space
- Togetherness, Herbart on, 358 f.
- Toland, John, 180, 181
- Tractatus Theologico-Politicus* (Spinoza), 72, 73
- Traité des sensations* (Condillac), 191
- Transcendental, analytic, Kant on, 221, 222 f.; ego, Kant on, 225; esthetic, Kant on, 220 ff.; ideal, Kant on, 238; logic, Kant on, 221 f.; objects, Kant on, 241 f., 251
- Transcendentalism, in America, 452; Kant's, 220 ff.
- Treatise Concerning the Principles of Human Knowledge* (Berkeley), 140, 145
- Treatise on Human Nature* (Hume), 152, 171
- Treatises on Government* (Locke), 123
- Trendelenburg, F. A., 411
- Trent, Council of, 23
- Truth, Dewey on, 470 f.; Fichte on, 291; James on, 464 f.; Locke on, 134; Schopenhauer on, 348; Spinoza on, 83 f., 86; Vico on, 205
- Tschirnhausen, 76

Turgot, 154, 198

Tycho Brahe, 17

Uncertainty, principle of, 510

Unconscious, Hartmann on, 437 f.

Understanding, Schopenhauer on, 342 f.

Unitarianism, in America, 451 f.; Priestley on, 181

United States, idealism in, 451 ff.

Universals, Berkeley on, 145; Locke on, 134 f.

Universe, Bruno on, 32; Fichte on, 281 f., 284; Hobbes on, 49; James on, 466 f.; Kant on, 232, 238; Spinoza on, 74, 77

Utilitarianism, 391 f.

Utilitarianism (Mill), 397

Utopia (More), 2, 40

Vaihinger, Hans, 478 f.

Valla, Laurentius, 4

Value, Lange on, 413; Meinong on, 483 f.; Santayana on, 506 f.

Vanborough, Vanessa, 141

Van den Ende, Francis, 71

Vanini, 29

Vatican Library, 4

Verrocchio, 16

Vesalius, 17

Vico, 205 f.; on certainty, 205; on God, 205 f.; on history, 207; on philosophy, 207; on truth, 205; on universe, 206

Views on Representative Government (Mill), 397

Virtue, Kant on, 252 f.

Voltaire, 180, 208; and Locke, 180; attacked Christianity, 180 f.

Von Bunsen, 381

Vulgate, errors in, 4

Wealth of Nations (Smith), 184

Weber, E. H., 382, 420

Weisse, 369

Weissmann, A., 419

Whitehead, A. N., 491 f.; on consciousness, 492; on events, 492 f.; on mind, 492; on Reality, 493 f.

Will, Descartes on the, 63 f., 96; Fichte on the, 282; Green on the, 424; Hegel on the, 322 f., 329; Hume on the, 162 f.; Kant on the, 249, 255; Leibnitz on the, 118; Locke on the, 127 f.; Schelling on the, 297 f.; Schopenhauer on the, 343 ff., 353; Spinoza on the, 85; see also Mind, Self

Will for Power, Nietzsche on, 440 f.

Will to believe, James on, 467

William of Orange, 21

Winckelmann, 211

Wolff, 213 f.; and Kant, 217

Words, Locke on, 132

World-process, Bosanquet on, 427; Hegel on, 304, 312, 318; Marx on, 372; Schopenhauer on, 345 f.; see also Universe

World revolution, Marx on, 376

Worms, Diet of, 20 f.

Wundt, W. M., 420

Ximenes, Cardinal, 23

"Young Hegelians," 370

Zadig (Voltaire), 180

Zwingli, 21

